

FIG. 1

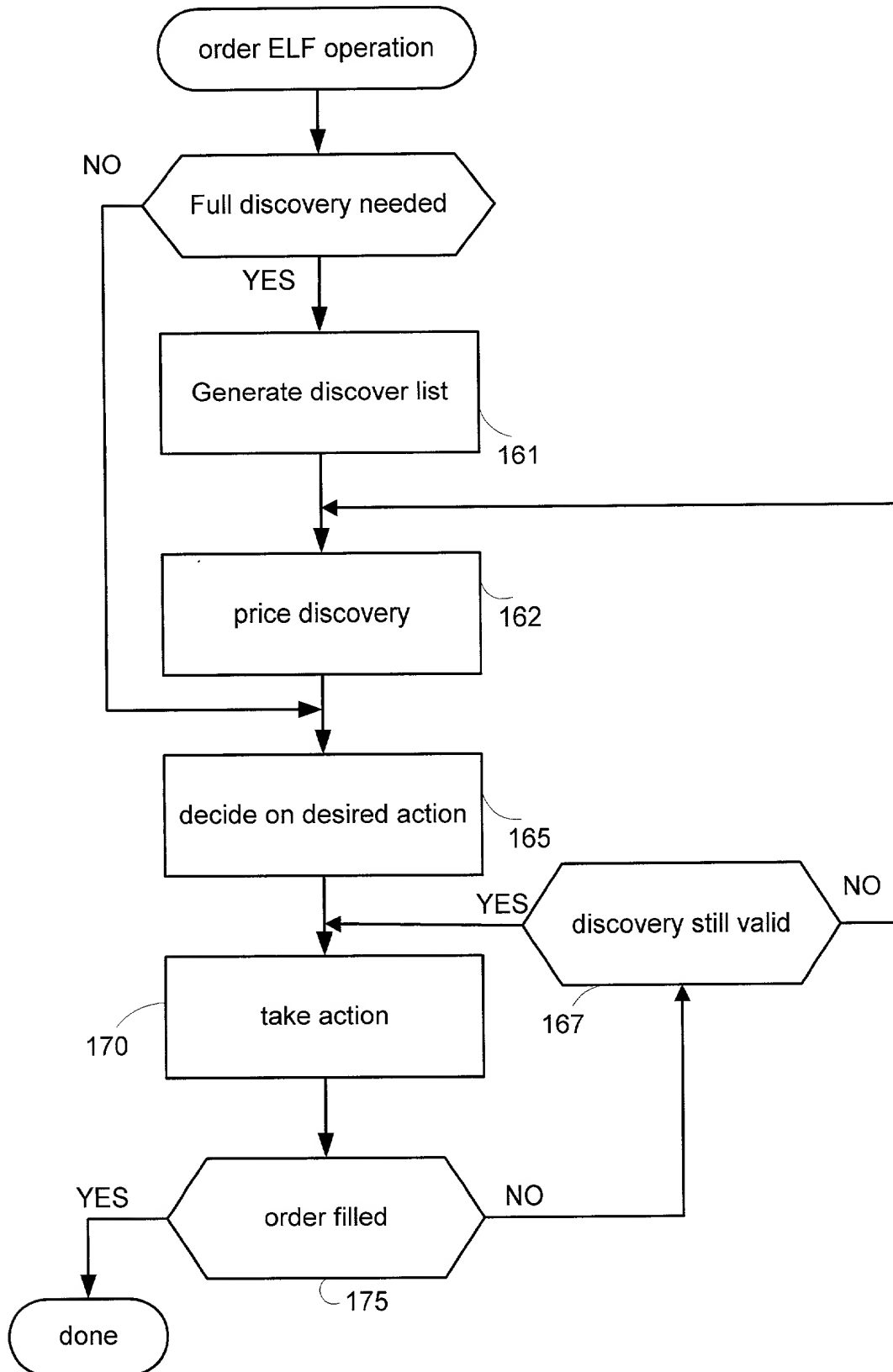


FIG. 2

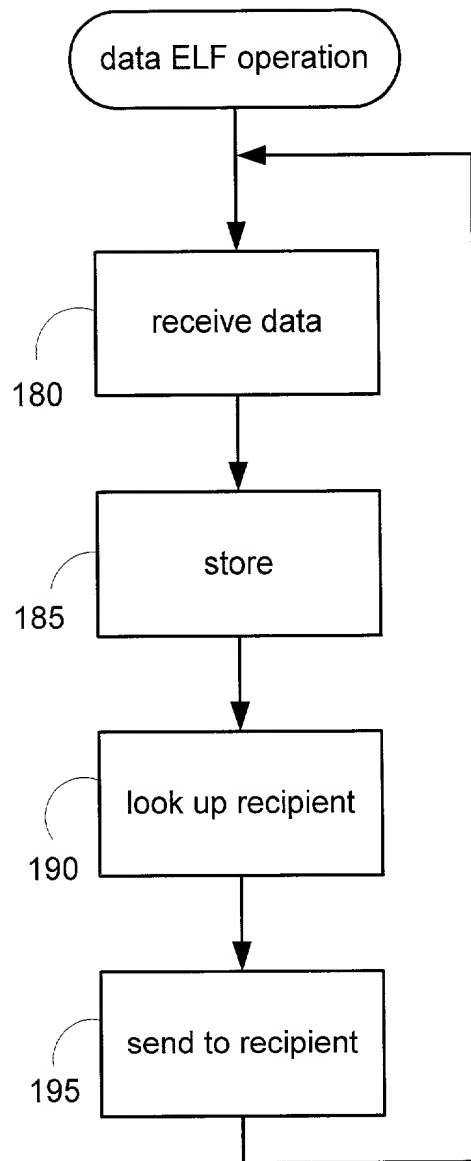


FIG. 3

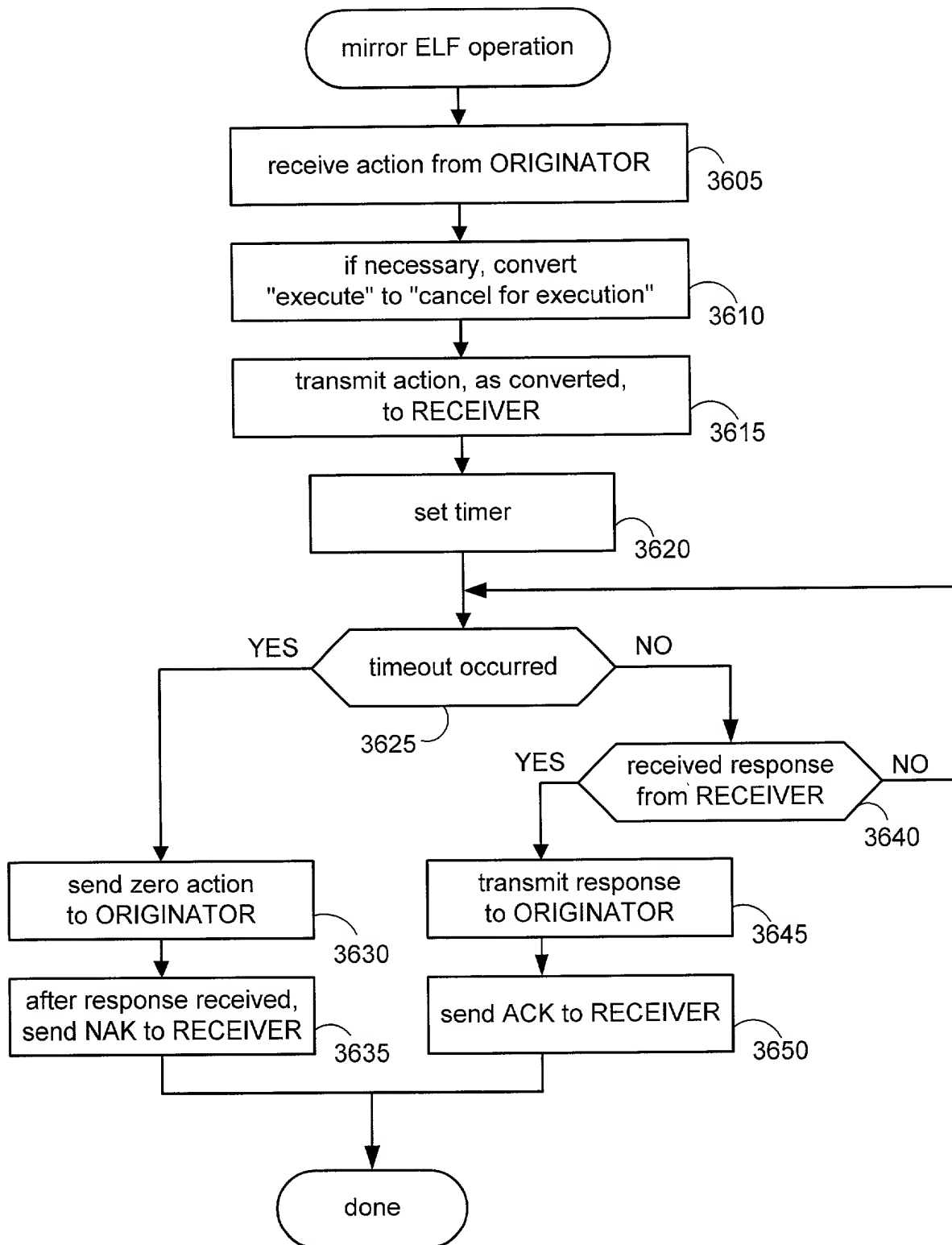


FIG. 4

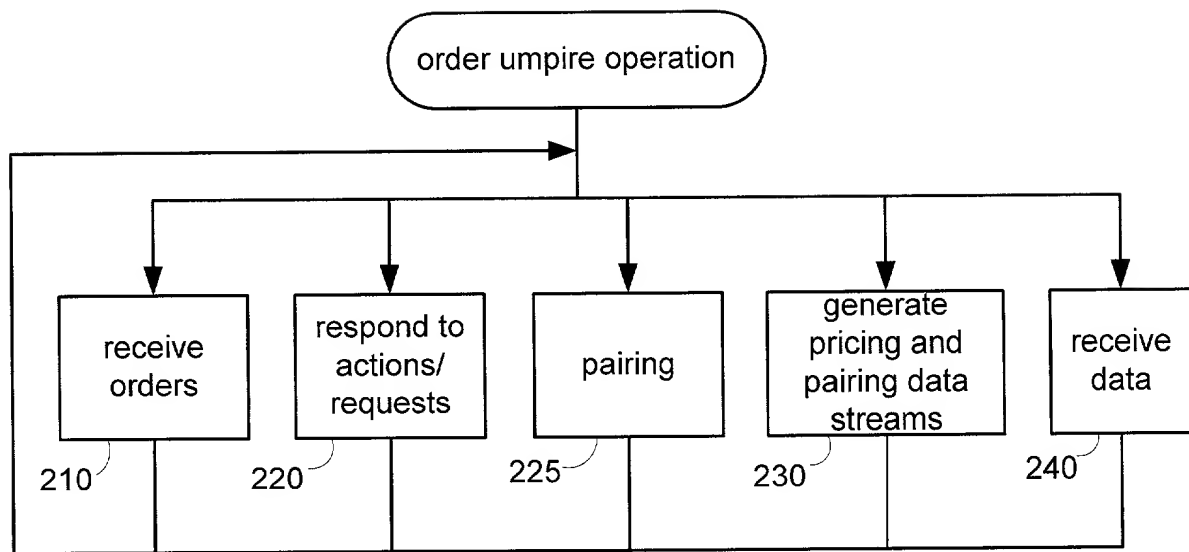


FIG. 5

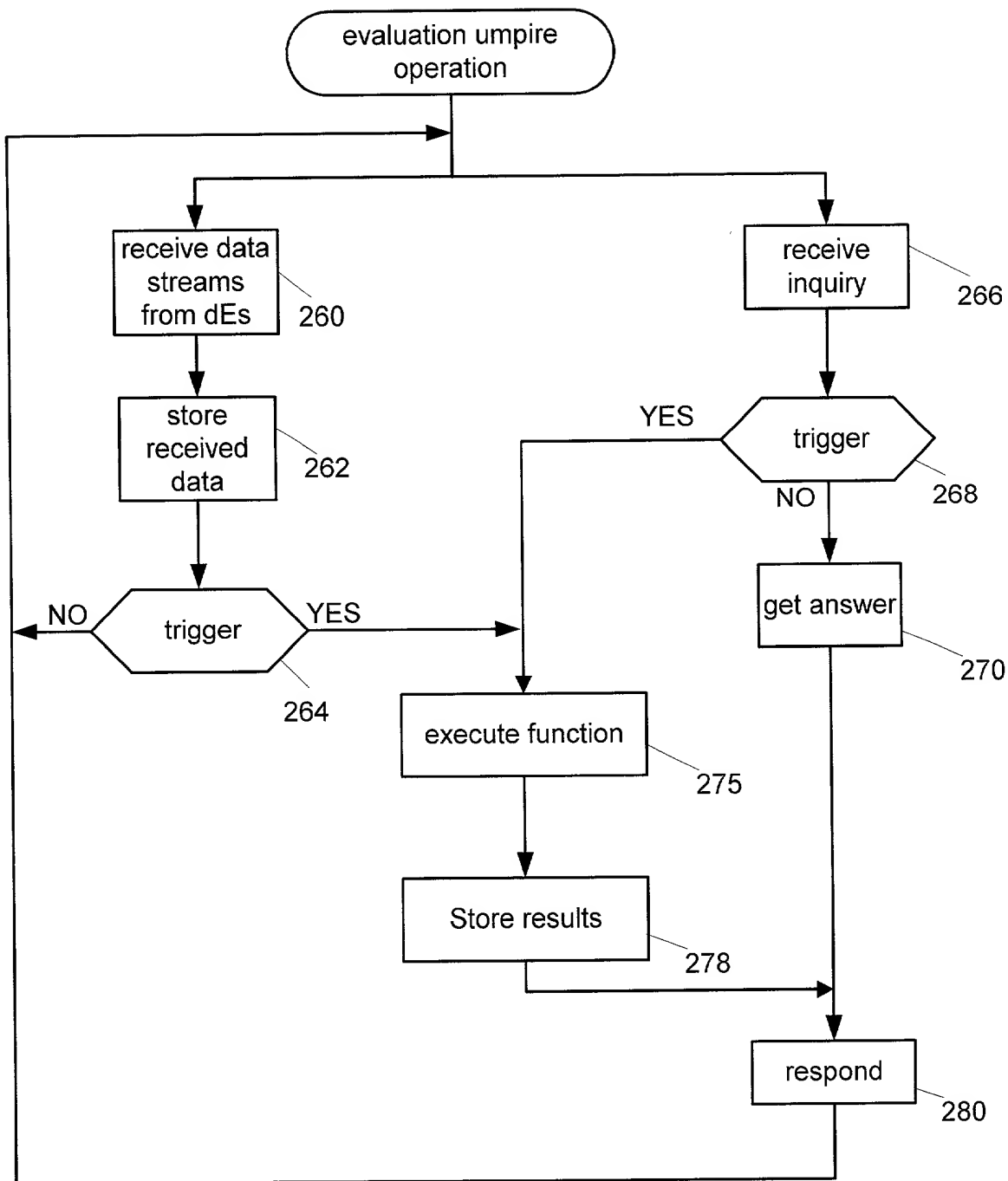


FIG. 6

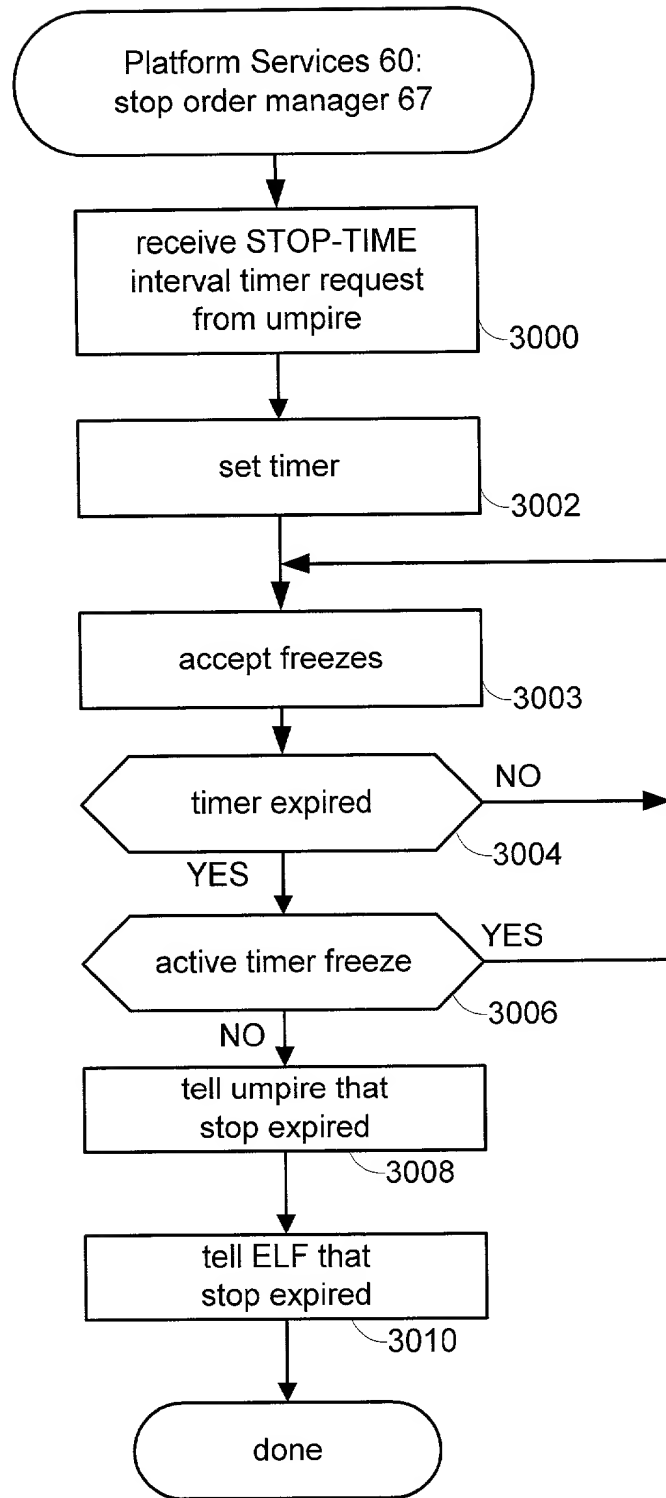


FIG. 7

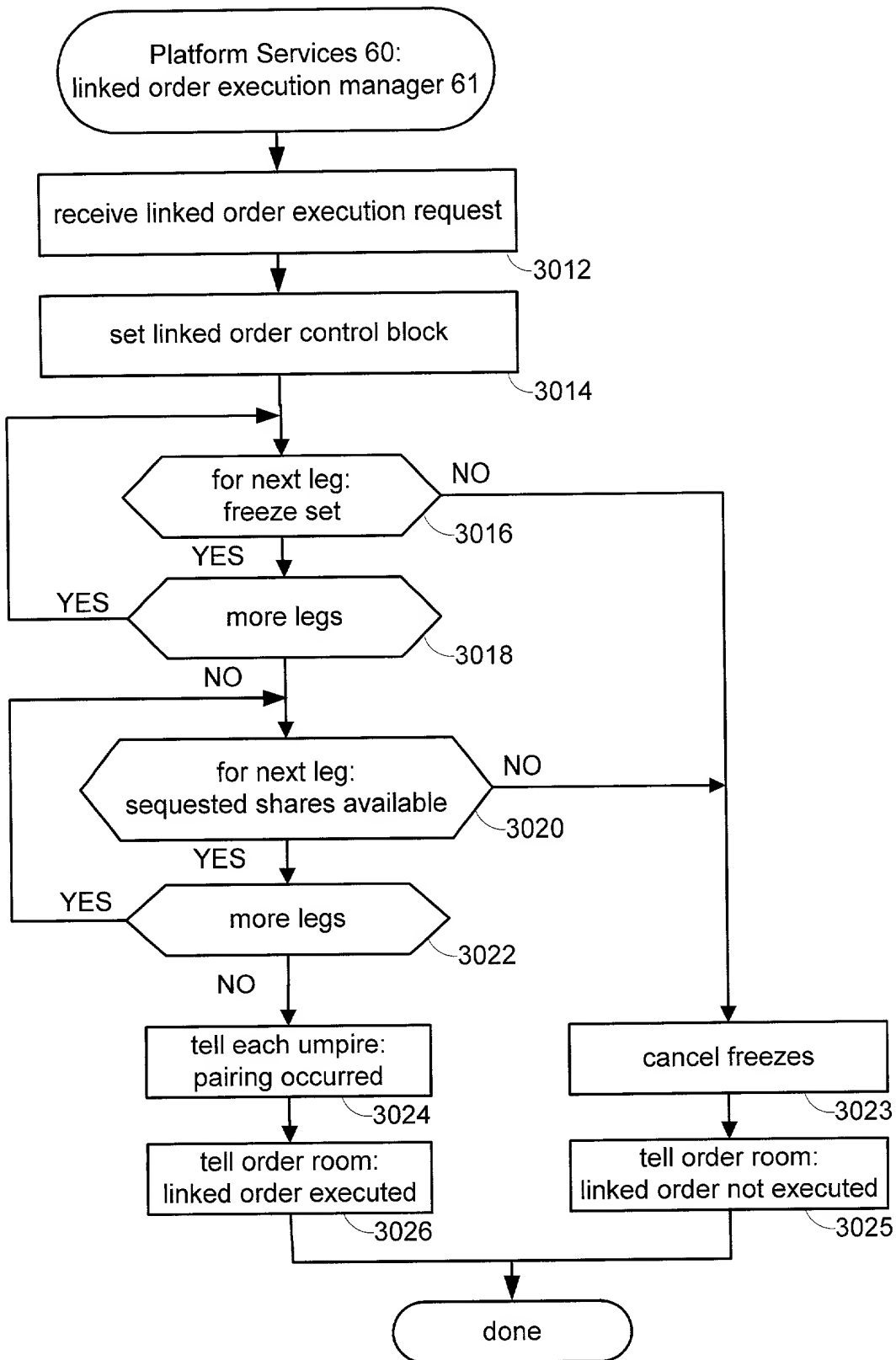


FIG. 8



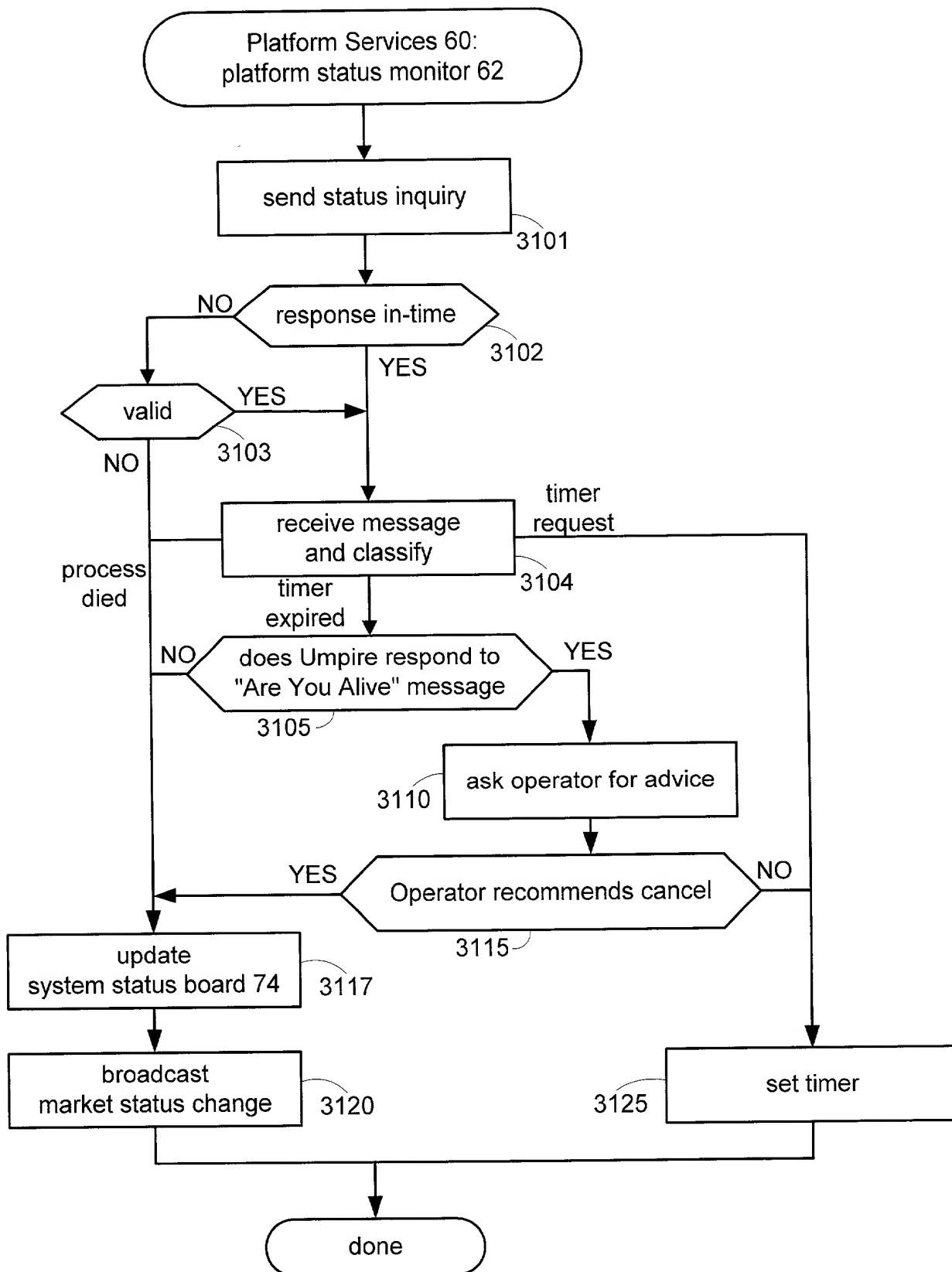


FIG. 9

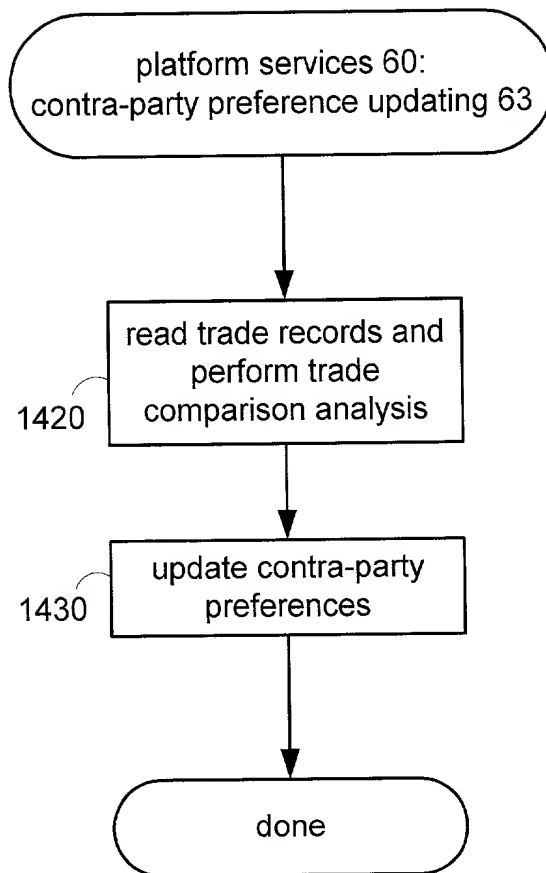


FIG. 10

		Status			
		Open/ Closed/ Suspended	Open/fast symbol/In- Process	List of ELFs Registered	(other status information)
Umpires	U1				
	U2				
	U3				
	U4				
	U5				
ELF 1					
ELF 2					
ELF 3					

74

FIG. 11

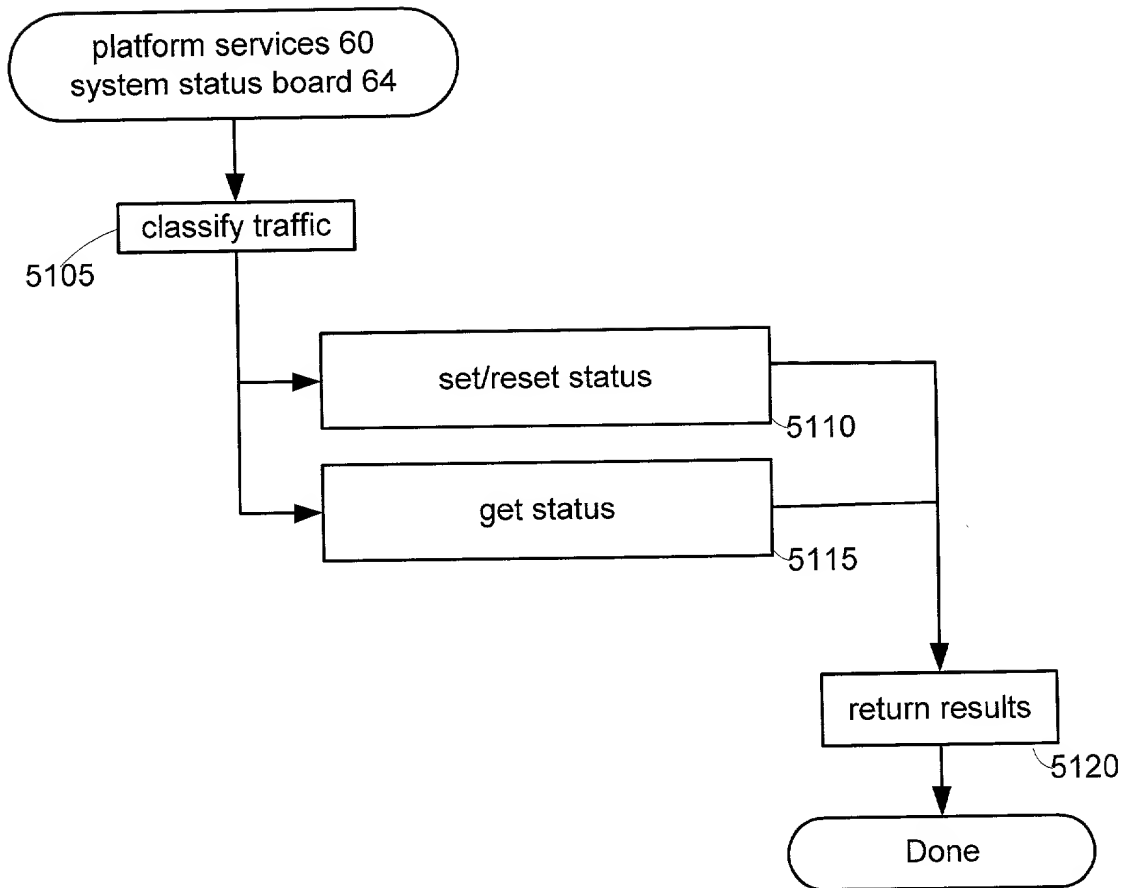


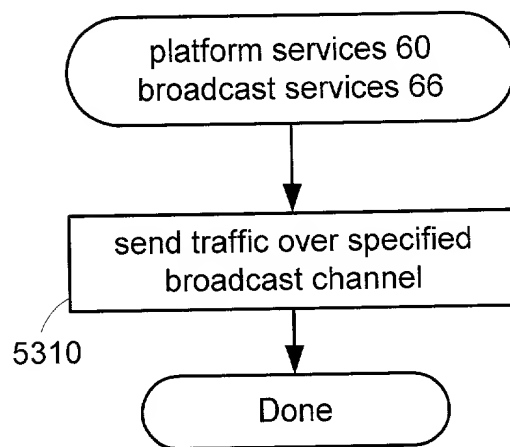
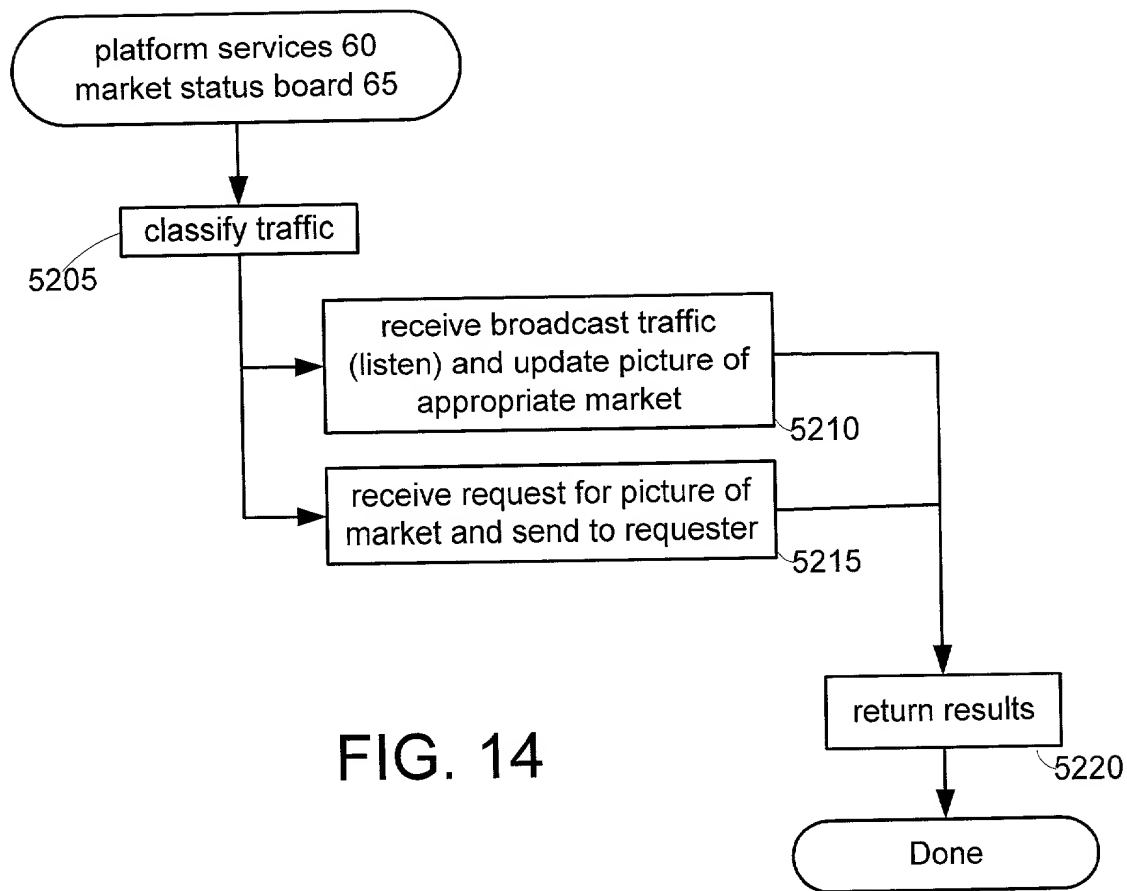
FIG. 12

Order Fields

Order Fields					
	Symbol	Side	Price	Size	Umpire
Orders	1				
	2				
	3				
	4				
	5				

75

FIG. 13



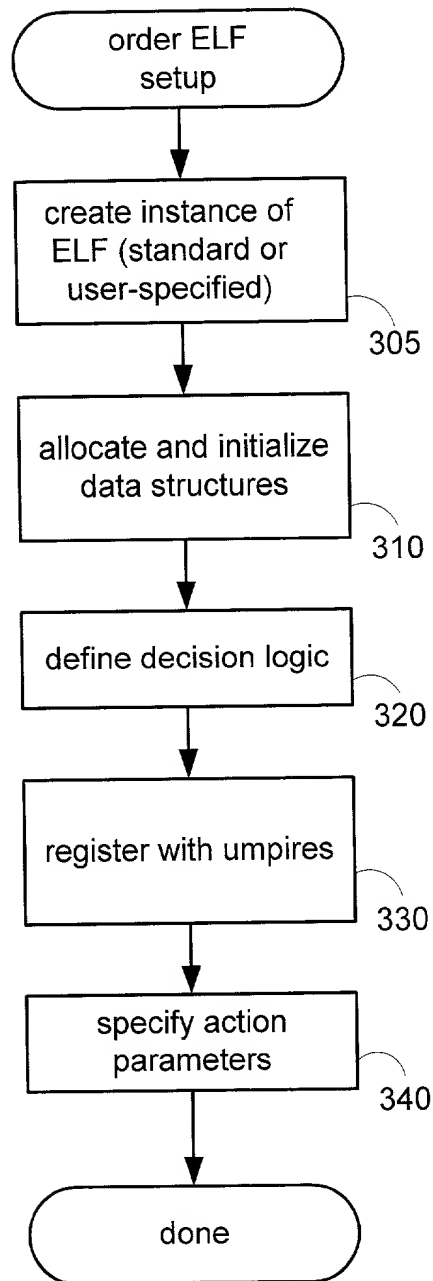


FIG. 16

110

sections	S-1	S-2	S-3		S-s
holding tanks	H-1	H-2	H-3		H-h
orders waiting in holding tanks	order-1				
	order-2				
	order-n				

FIG. 17

condition cells					action cells				

FIG. 18



name of symbol	type	attributes	default value	value

150

FIG. 19

umpire 342
umpire 30
.
.
.
umpire 154

130

FIG. 20

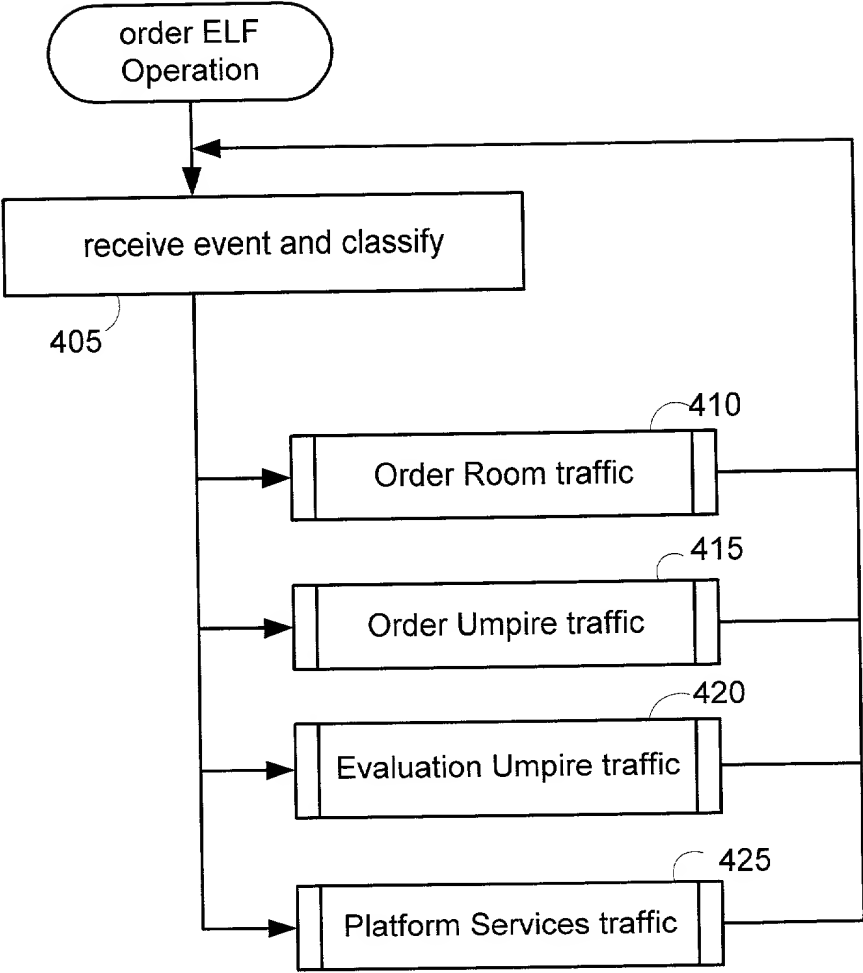


FIG. 21

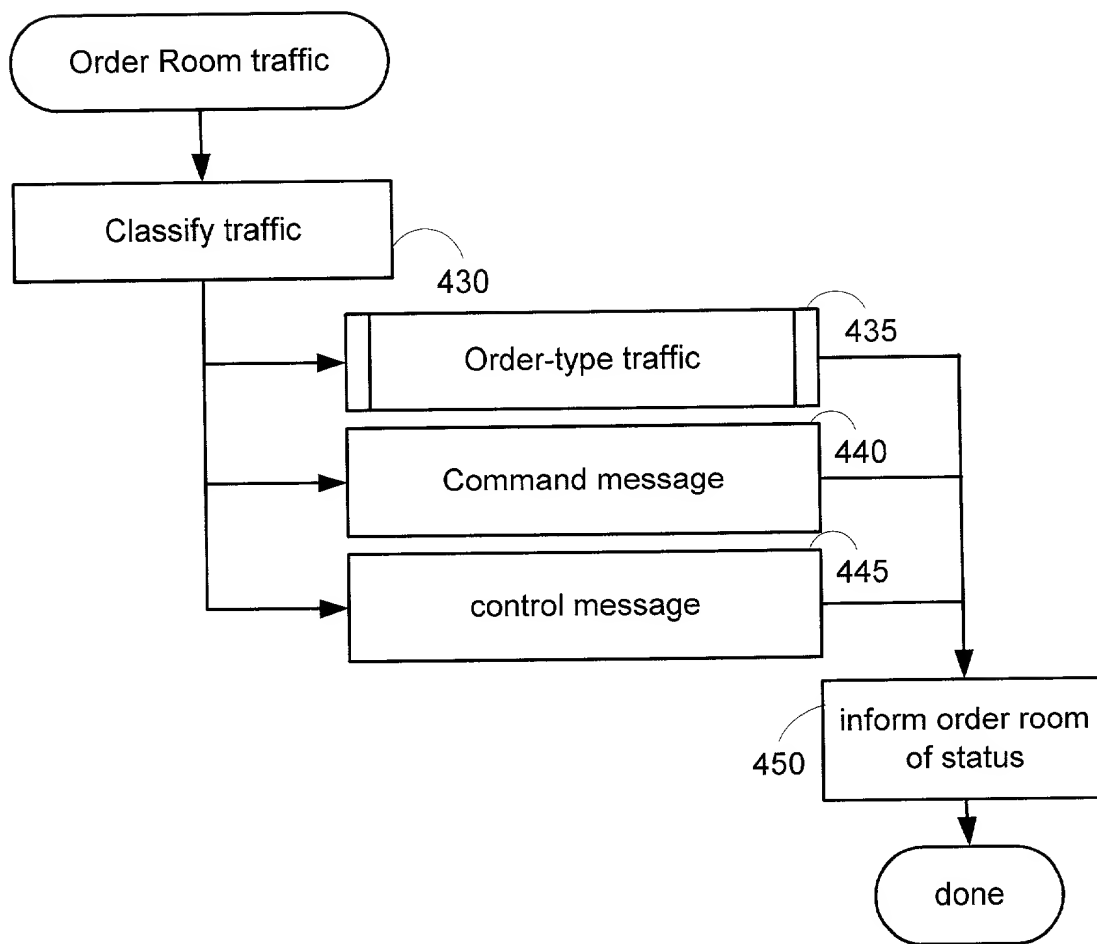


FIG. 22

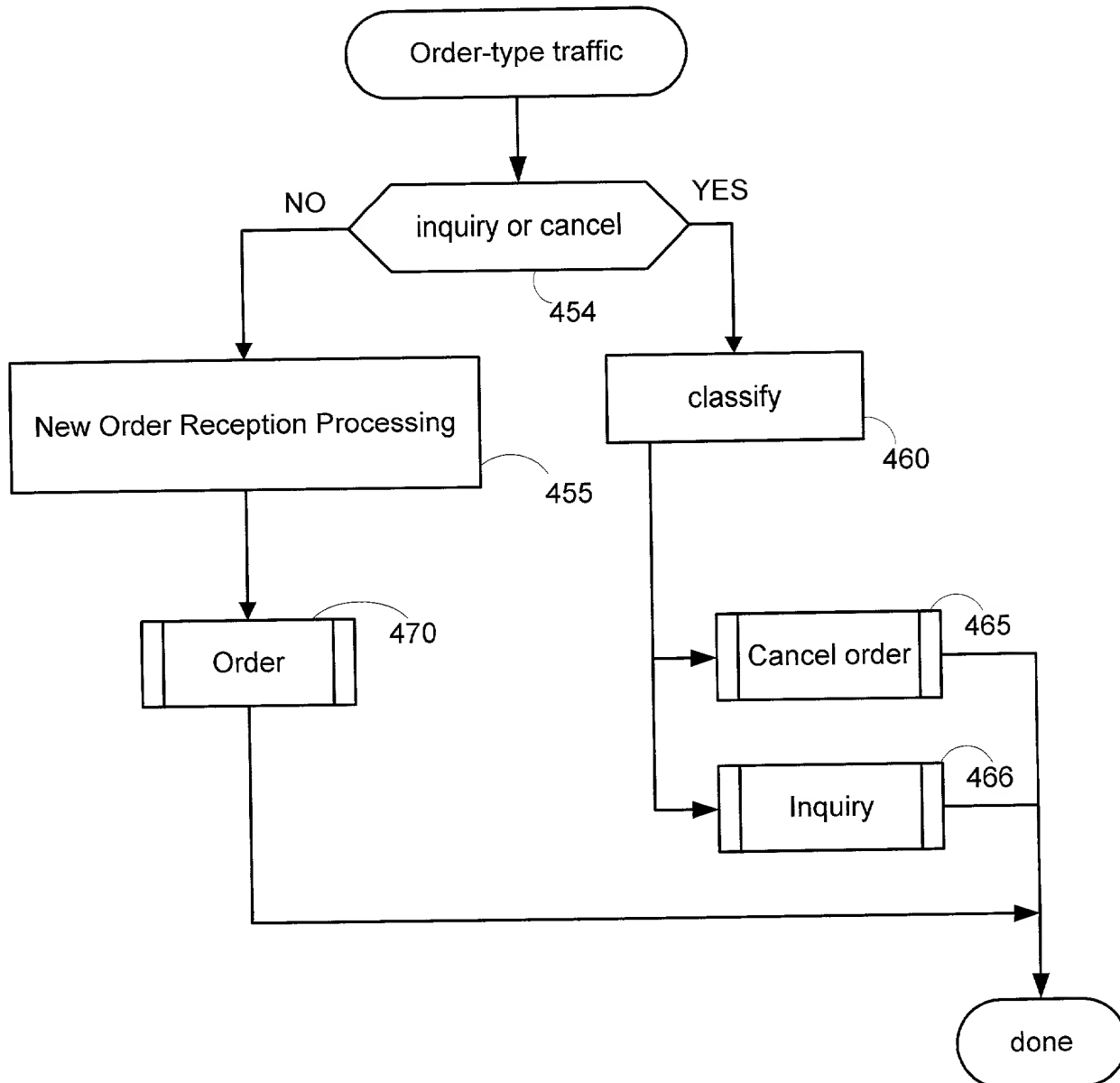


FIG. 23

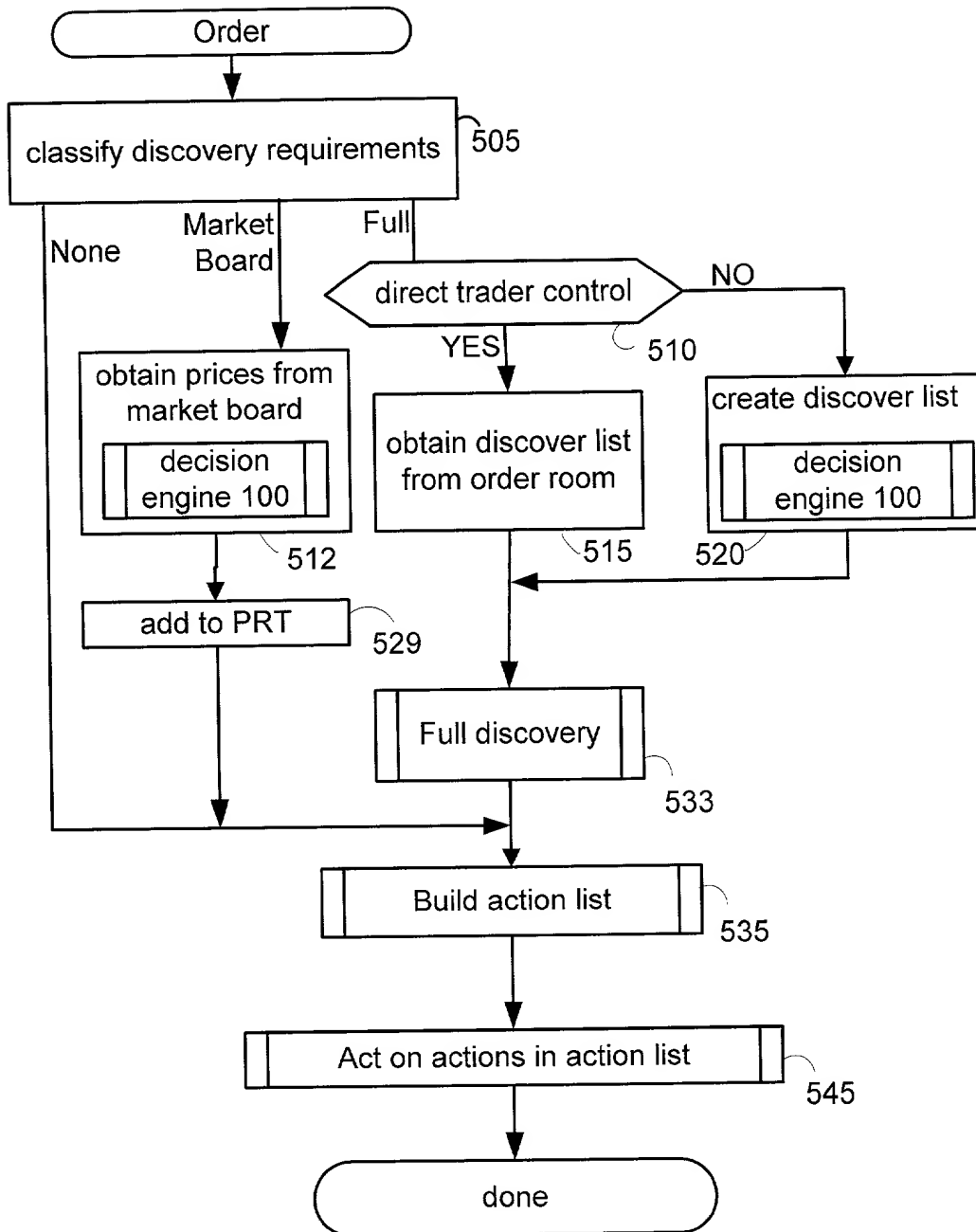


FIG. 24

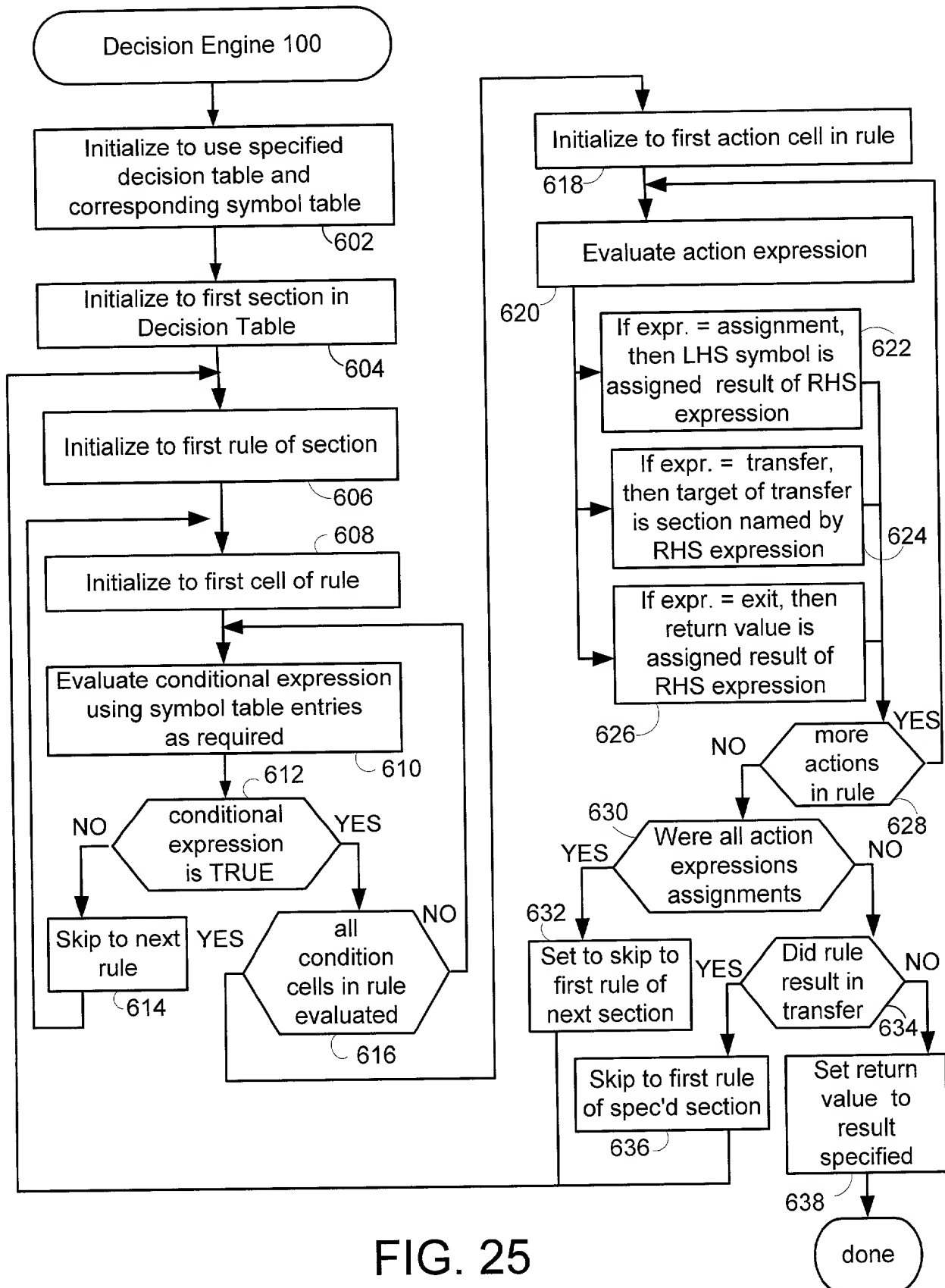


FIG. 25

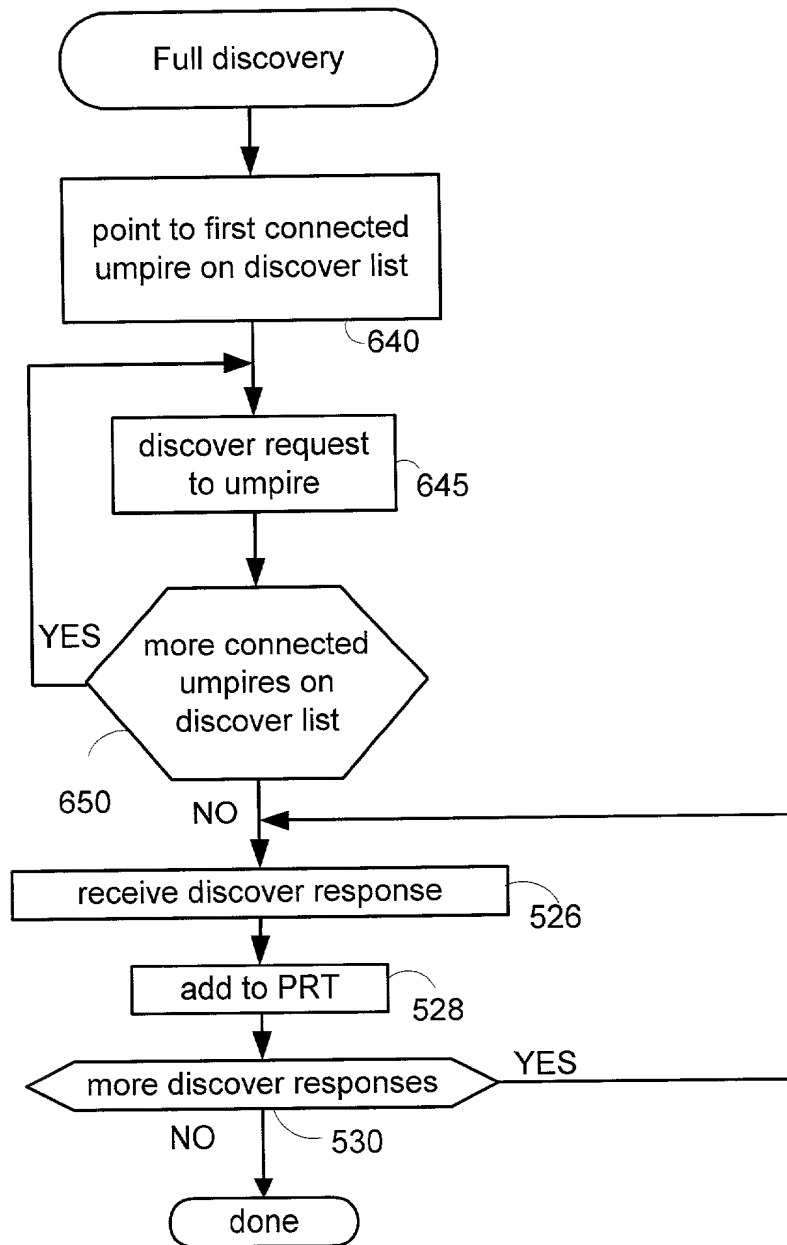


FIG. 26

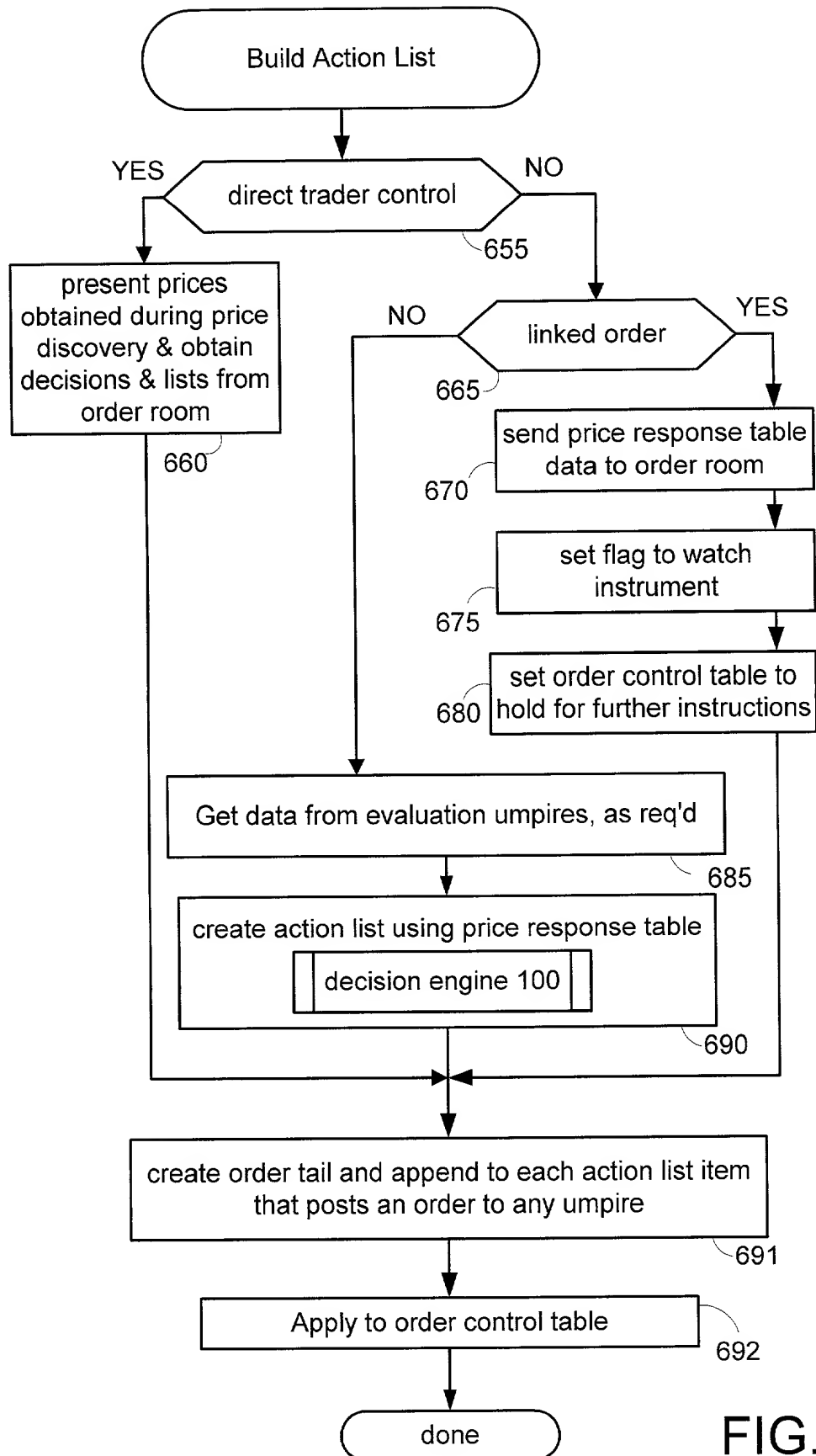


FIG. 27



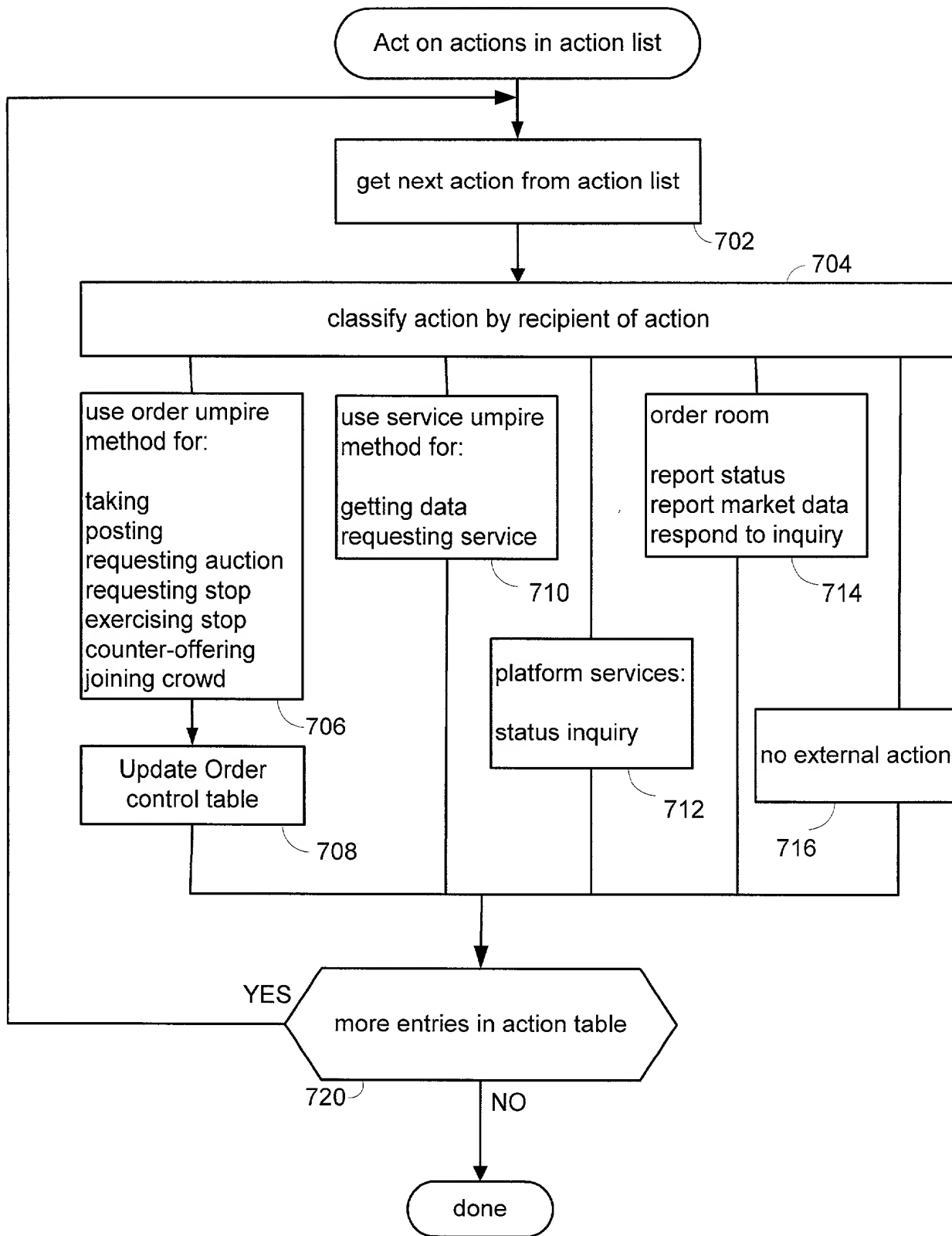


FIG. 28

FIG. 29A

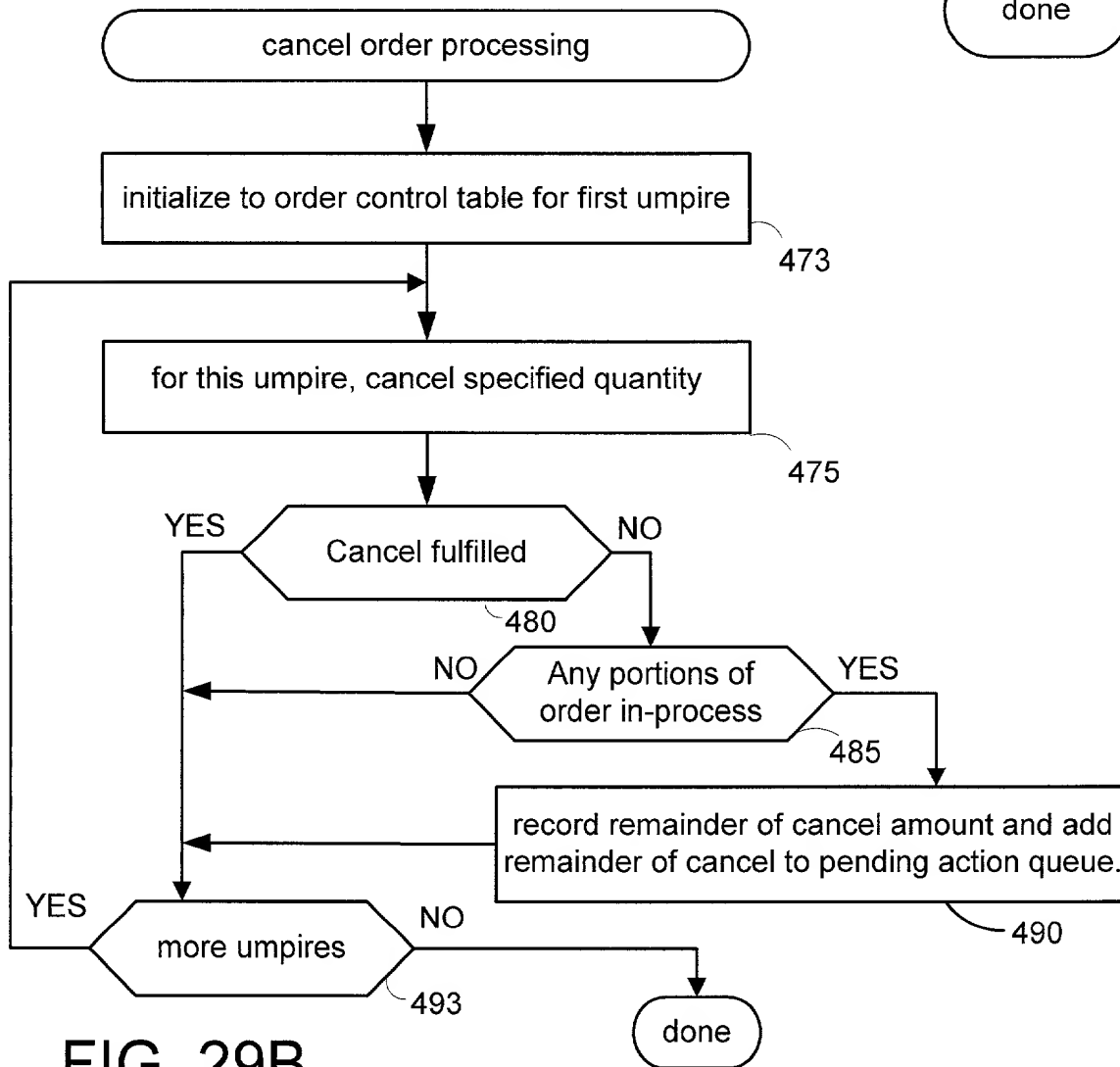
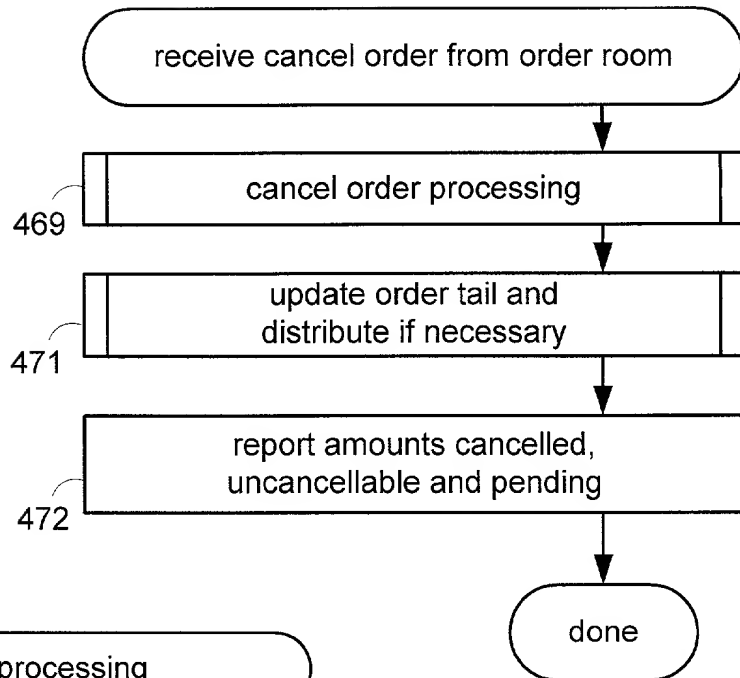


FIG. 29B

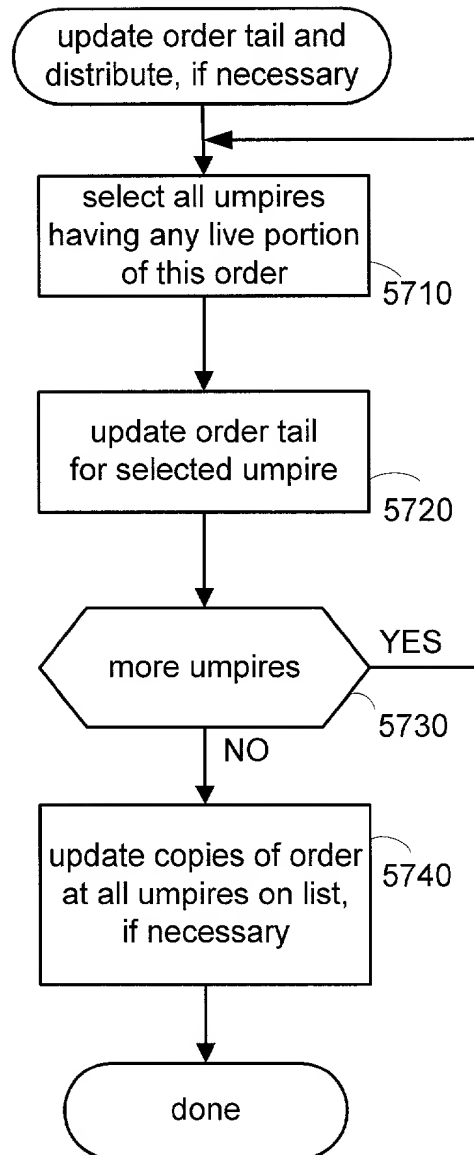


FIG. 30

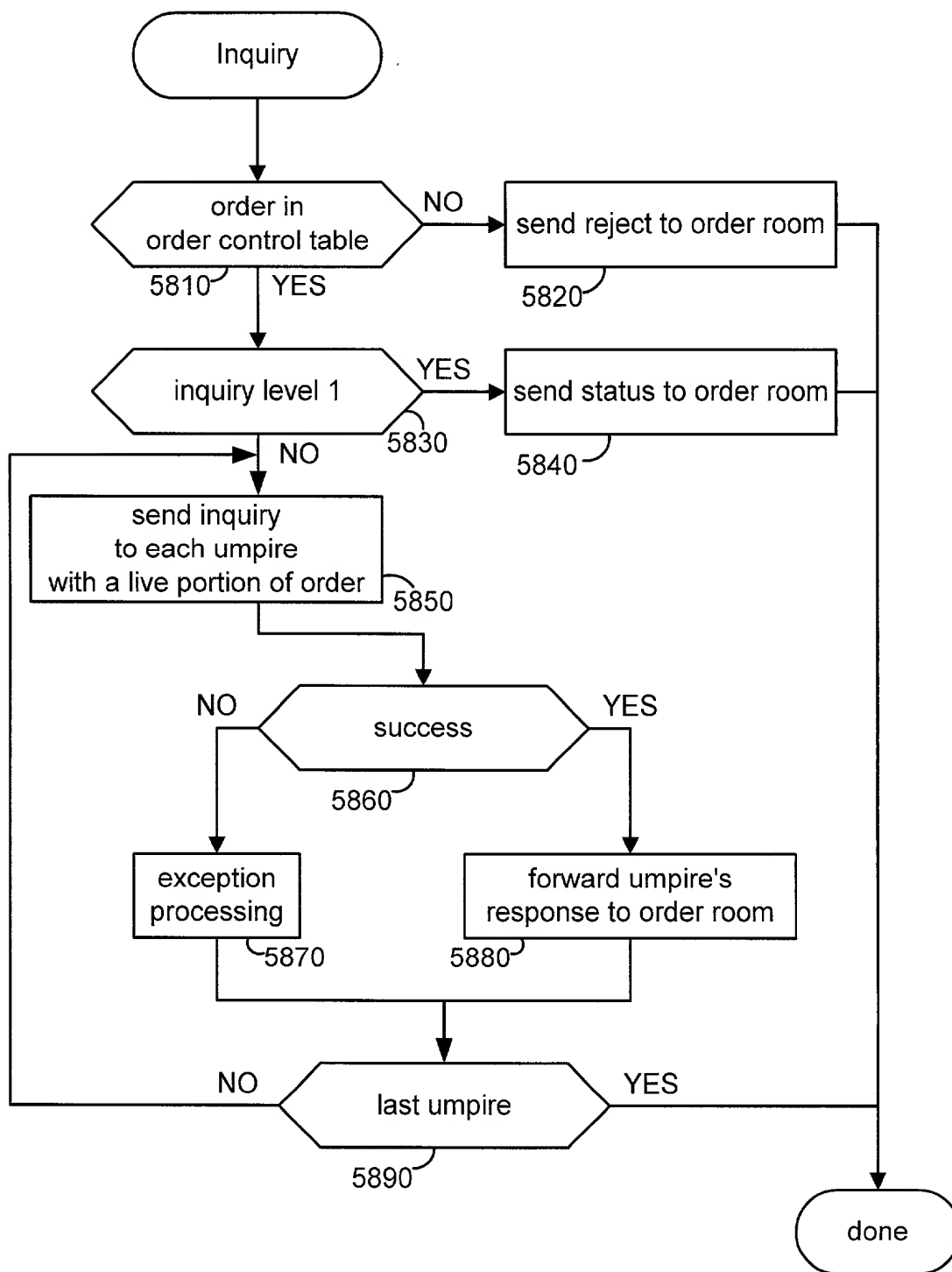


FIG. 31

FIG. 32 is a flowchart illustrating a process for handling Order Umpire traffic. The process begins with an oval labeled "Order Umpire traffic", which leads to a rectangular block labeled "classify traffic" (725). From "classify traffic", the flow branches into four parallel paths, each leading to a rectangular block: "Prices" (735), "Action response" (740), "Pairing report" (742), and "Unsolicited umpire traffic" (745). These four blocks are stacked vertically. Arrows from the right side of each of these four blocks converge into a single vertical line that leads to an oval labeled "done".

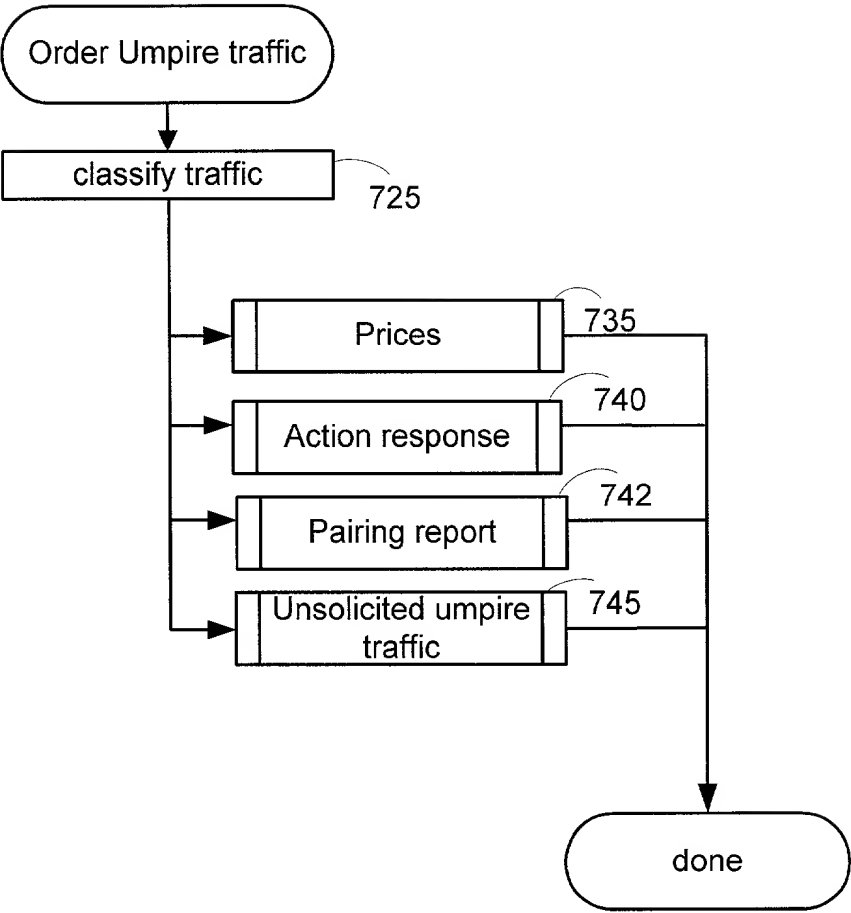


FIG. 32

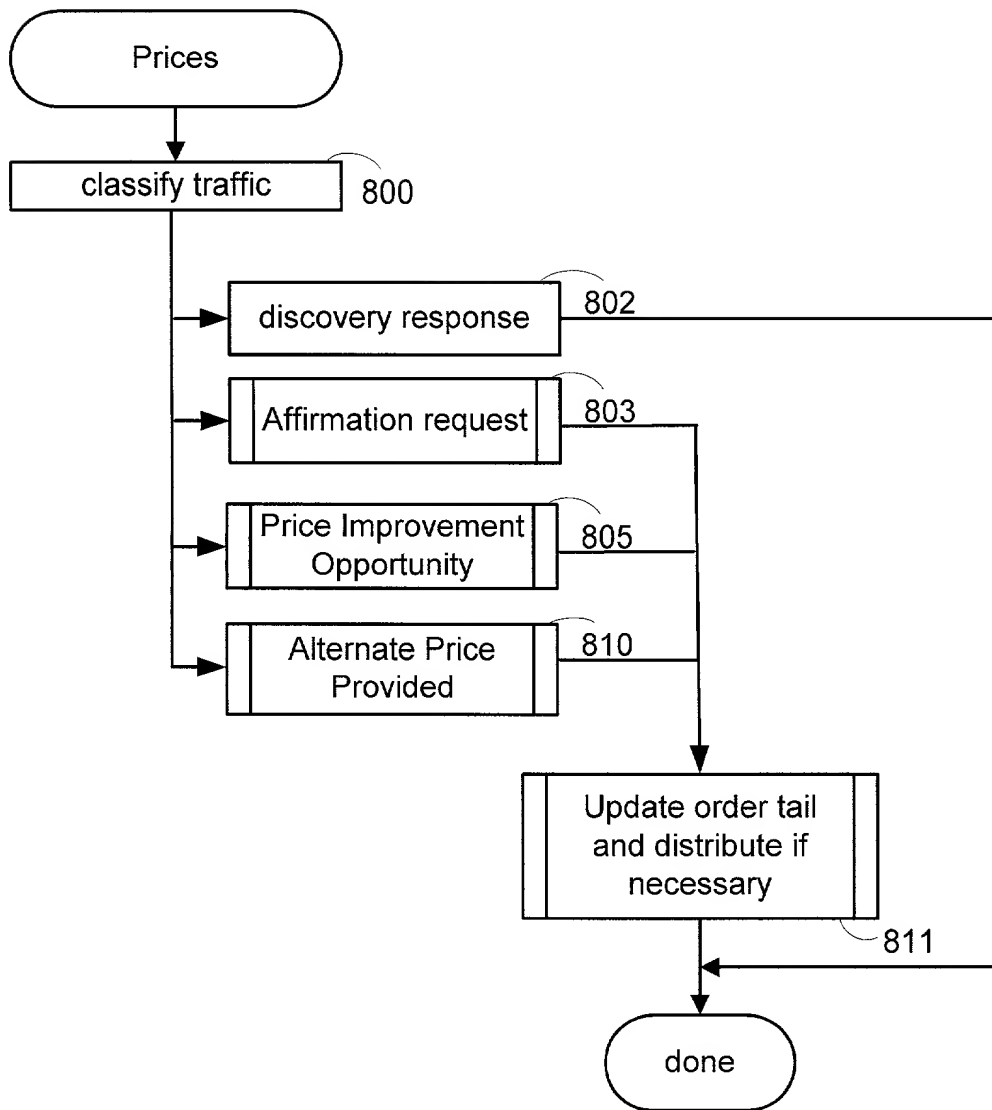


FIG. 33

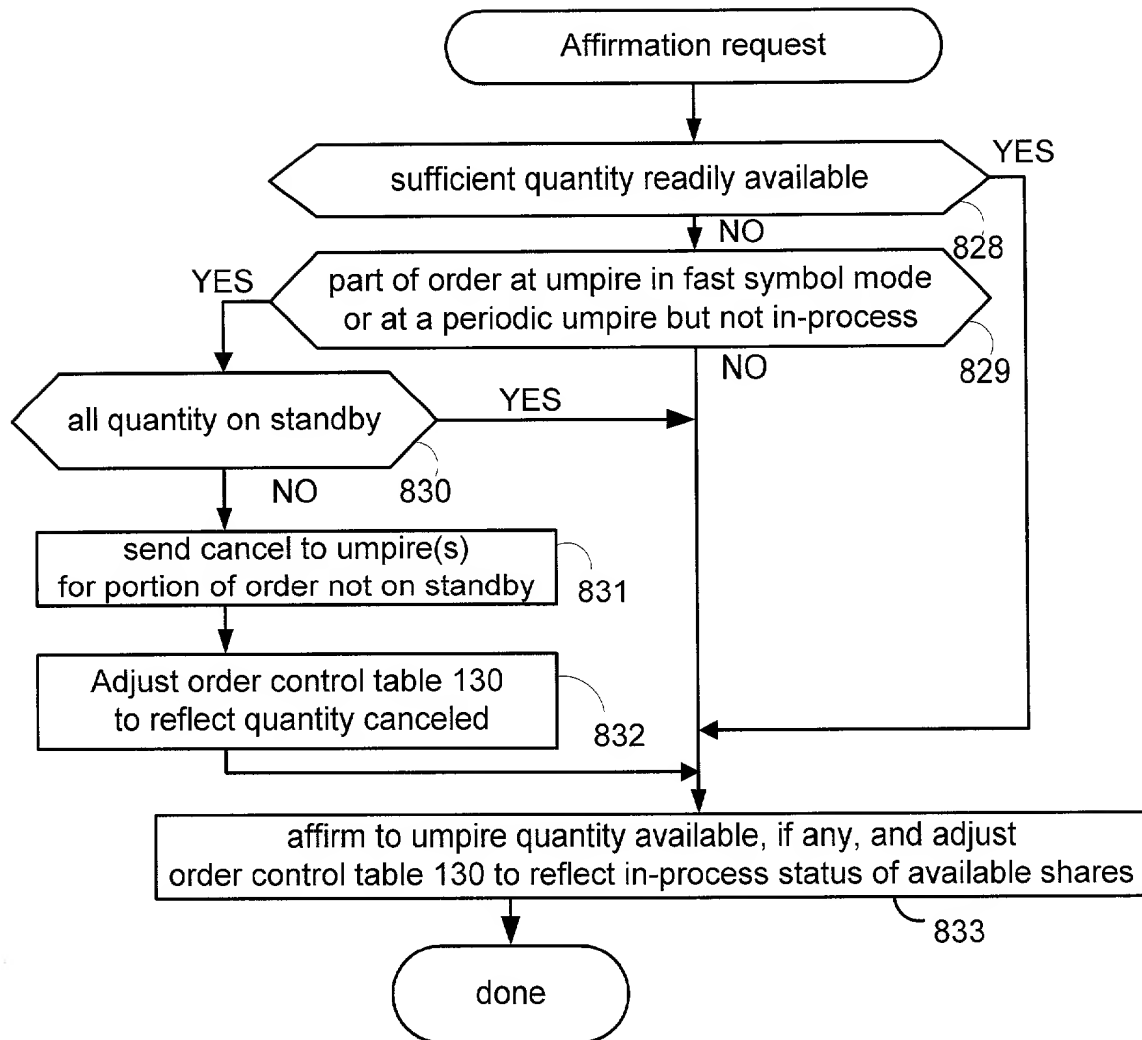


FIG. 34

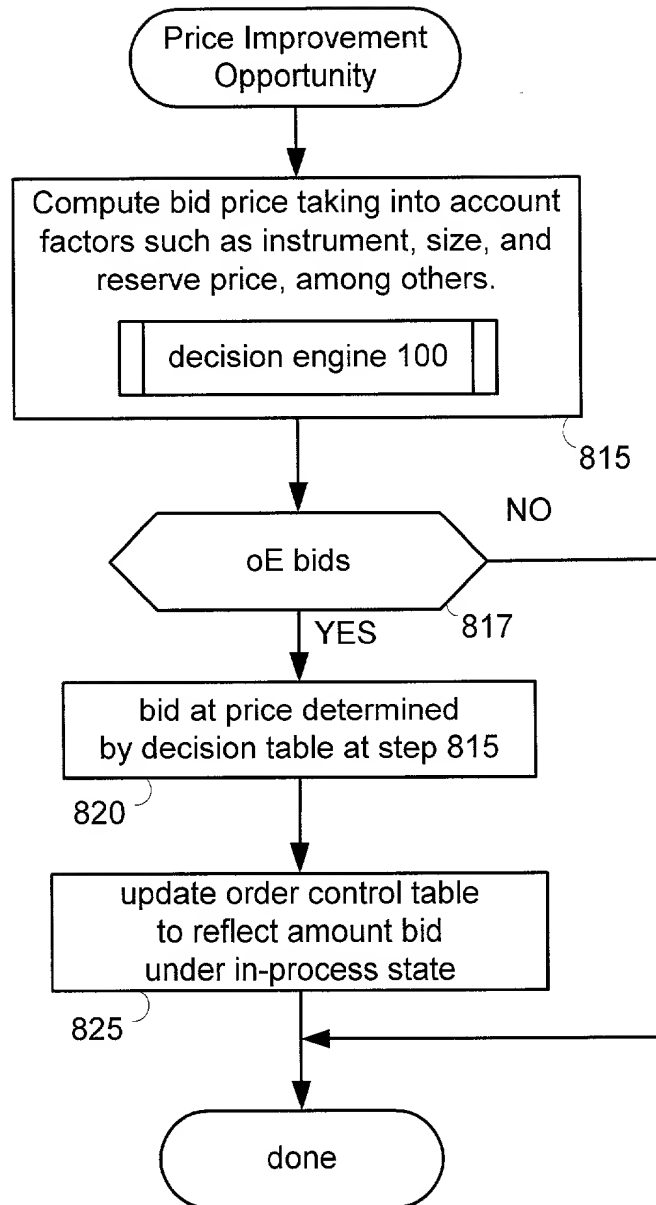


FIG. 35



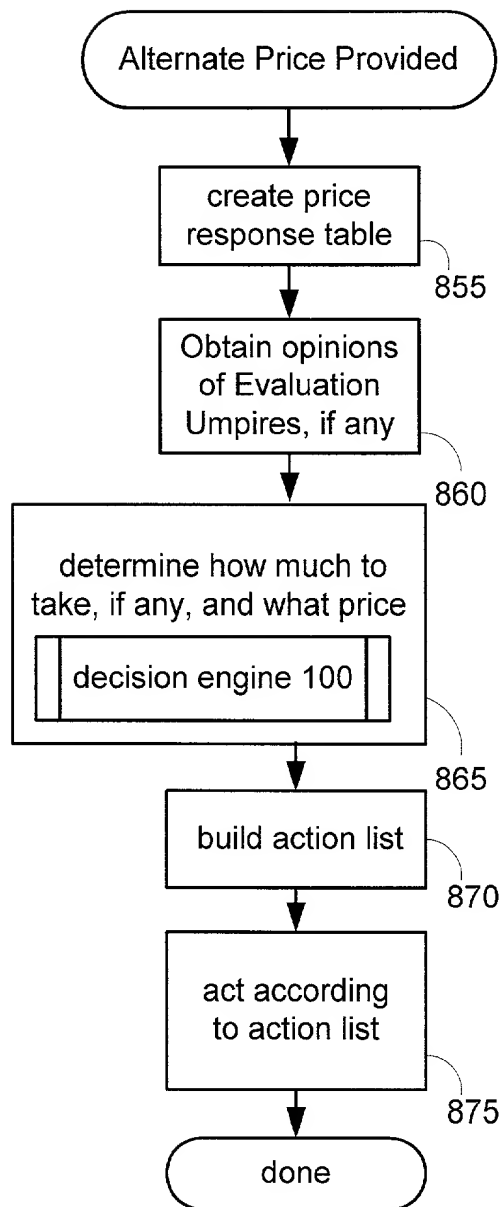


FIG. 36

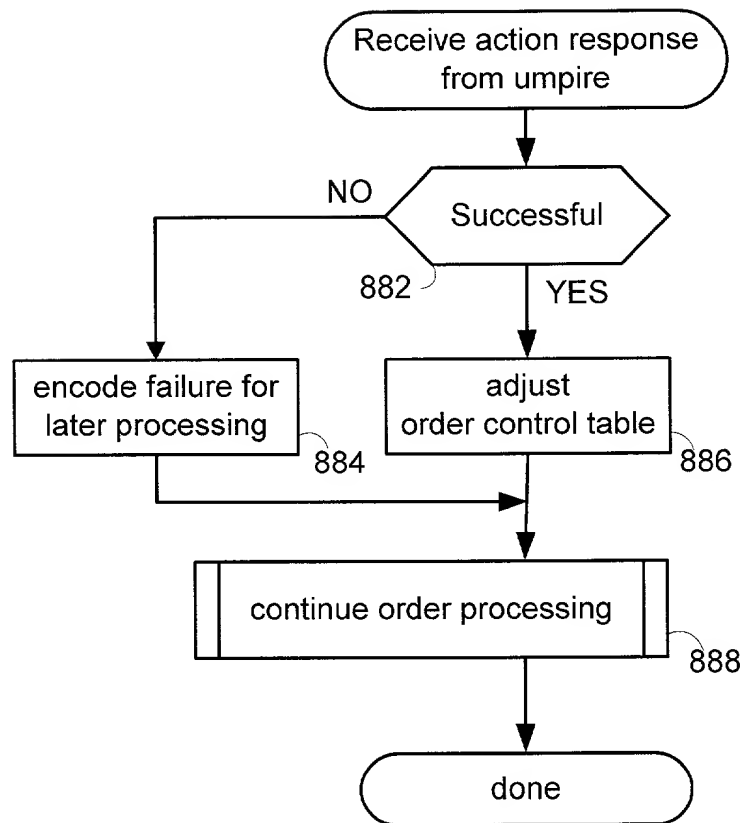


FIG. 37

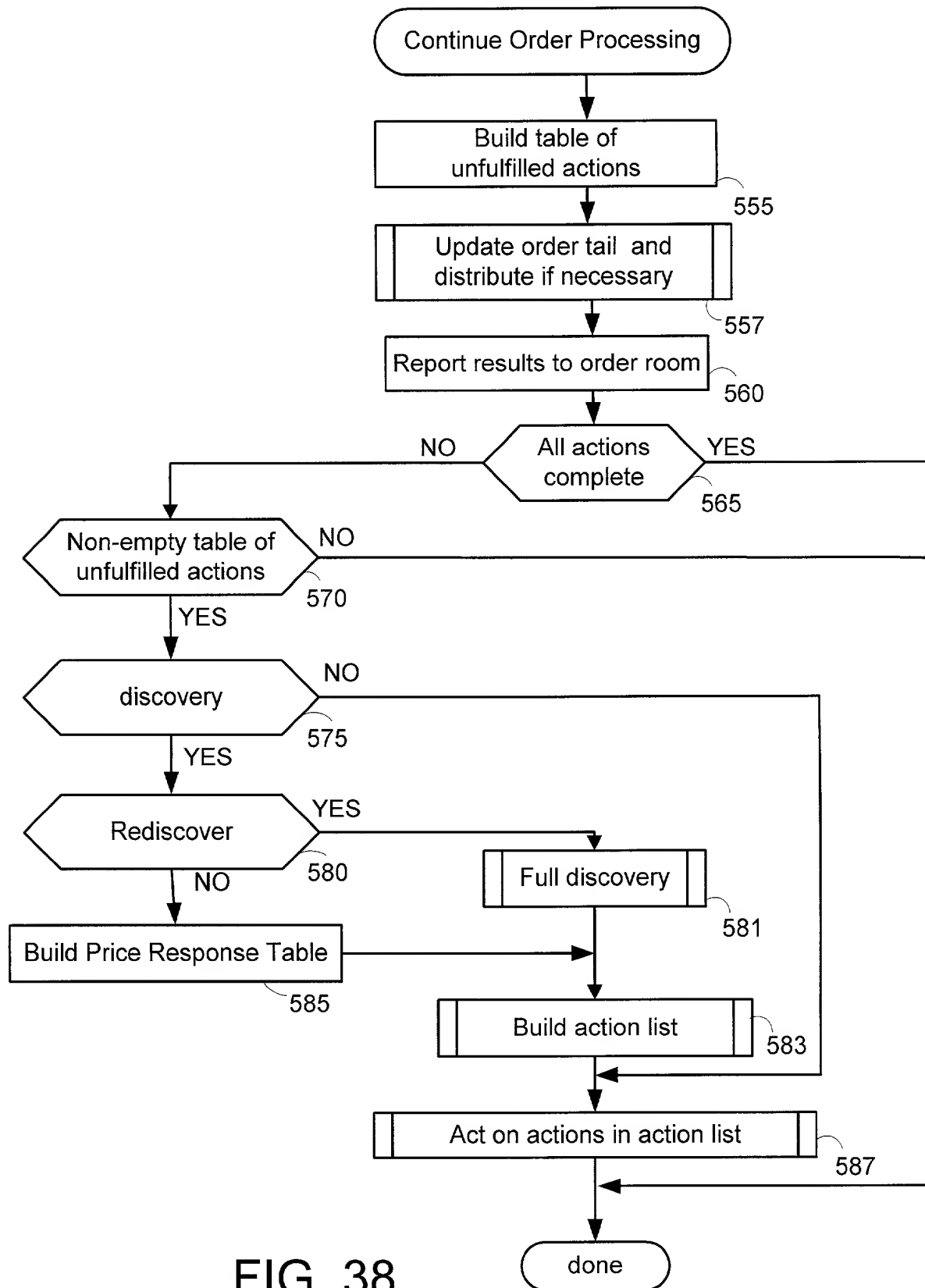


FIG. 38

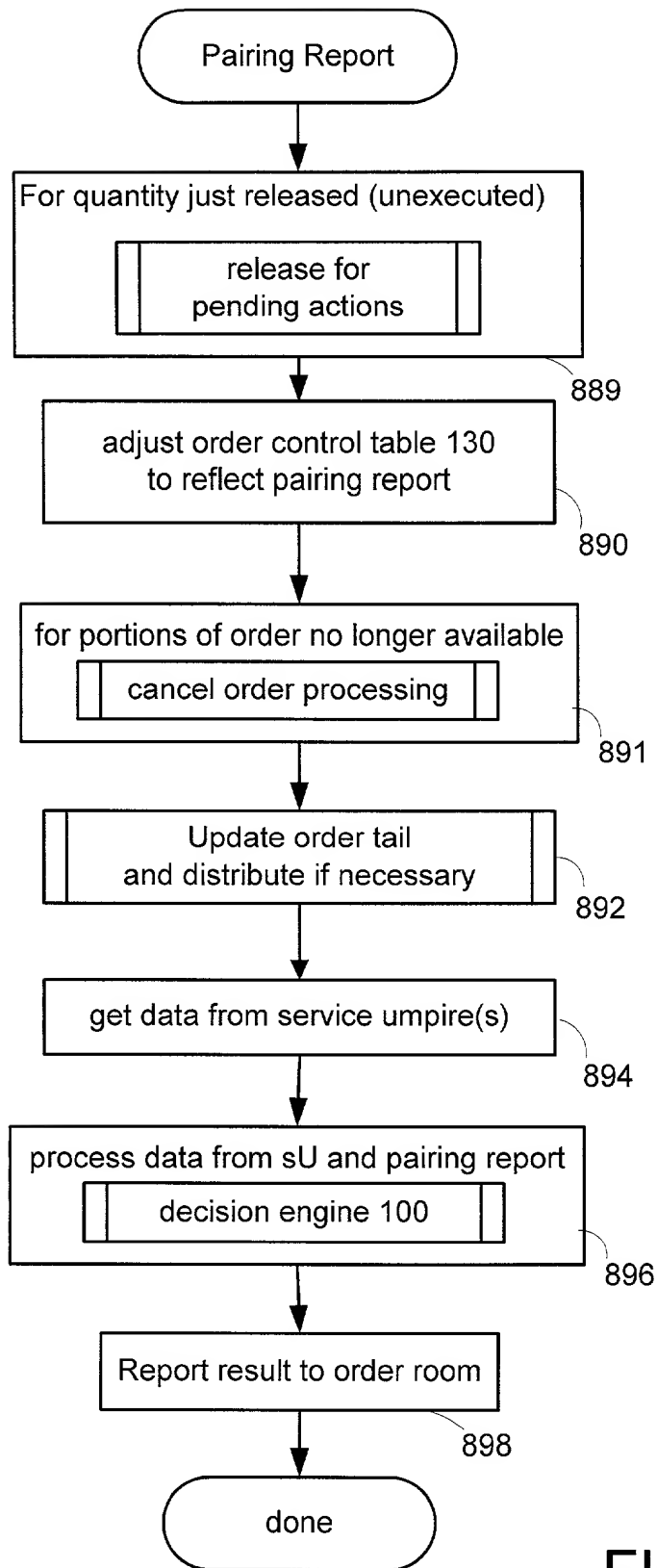


FIG. 39

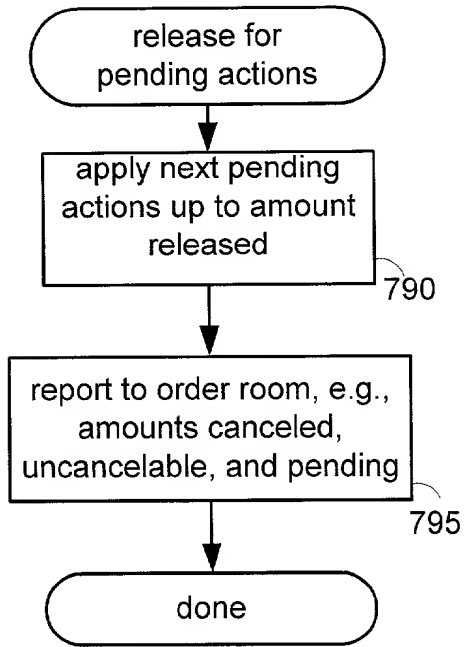


FIG. 40

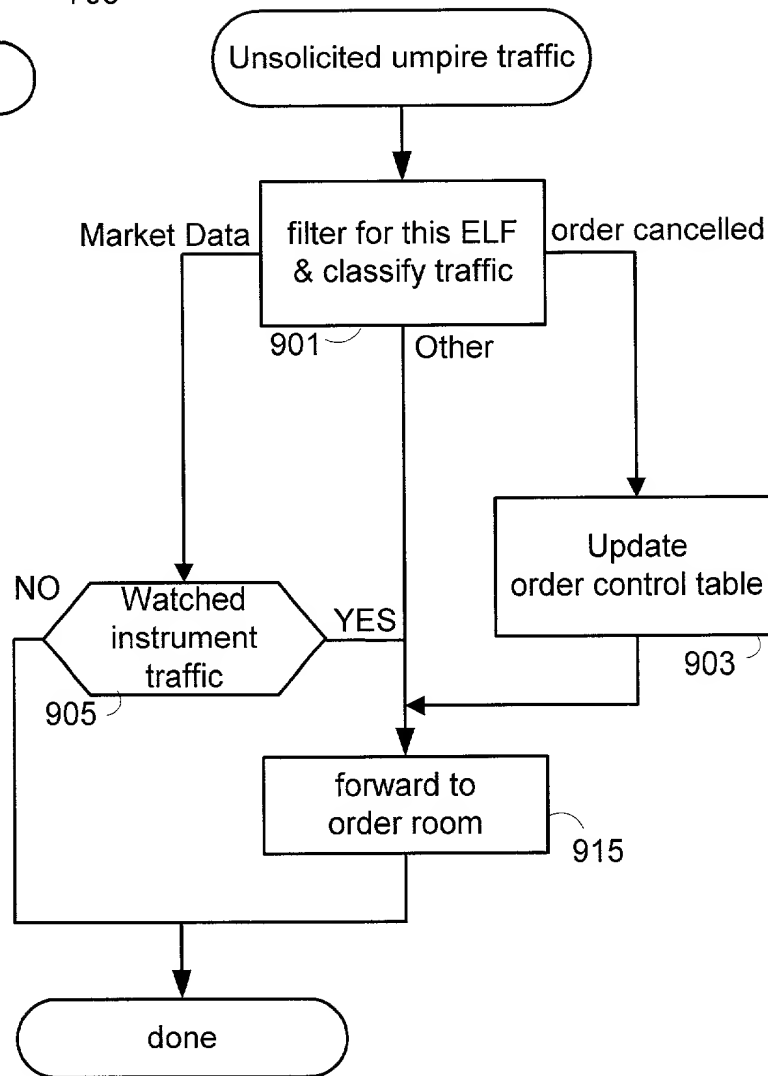


FIG. 41

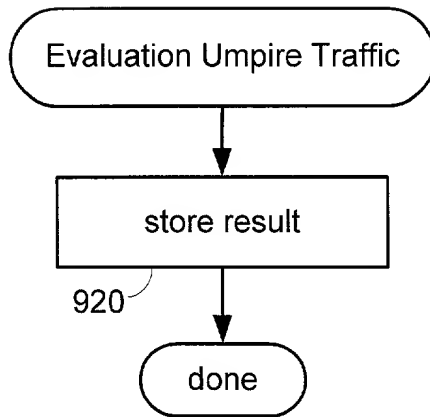


FIG. 42

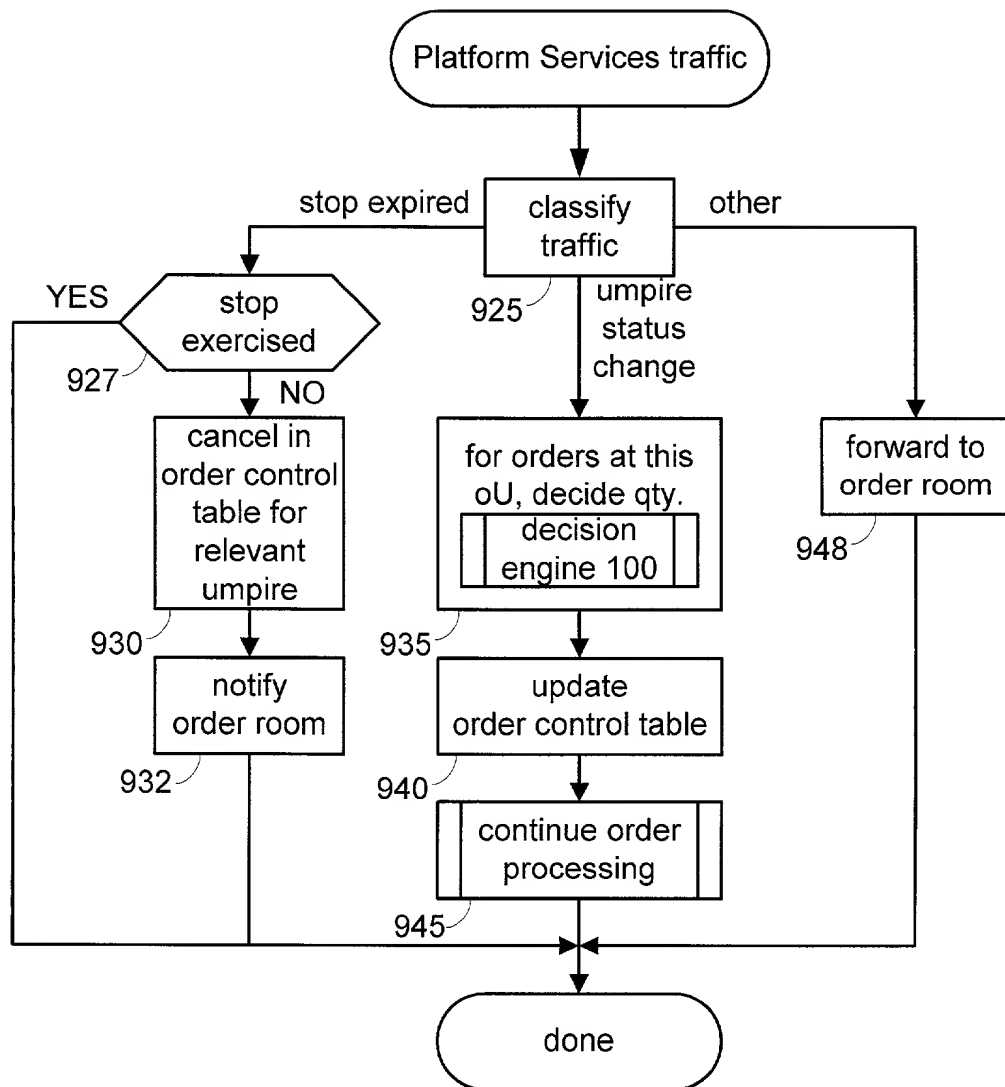


FIG. 43

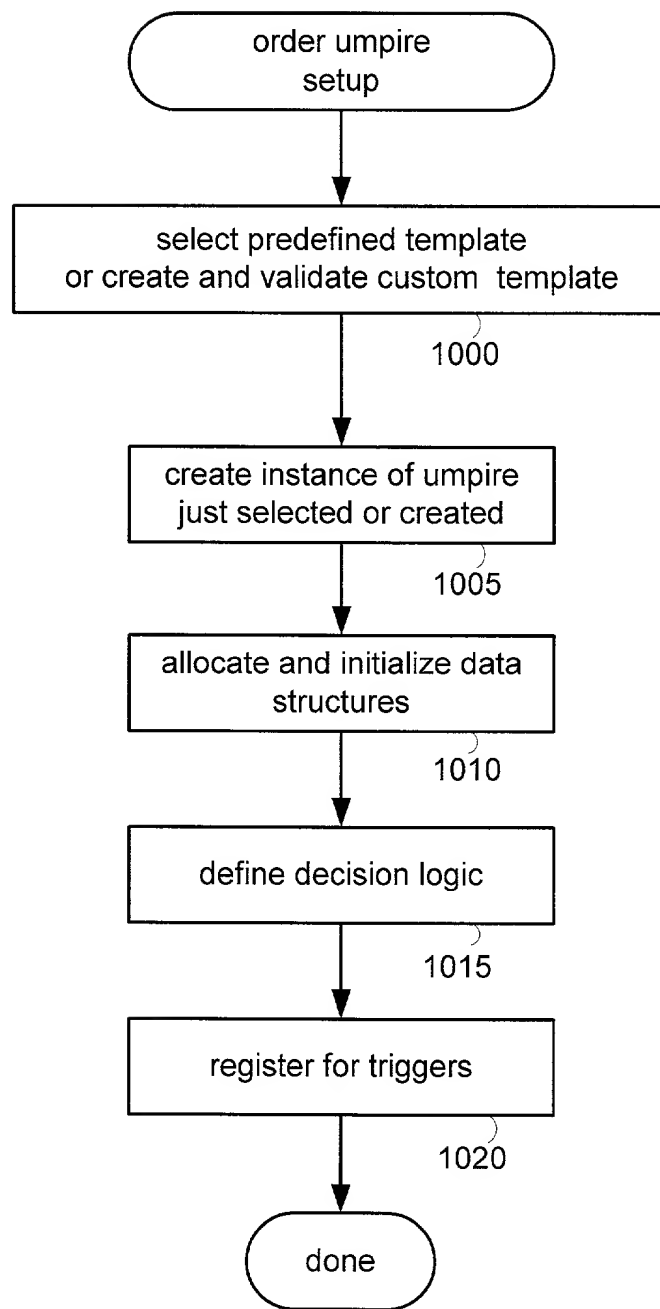


FIG. 44

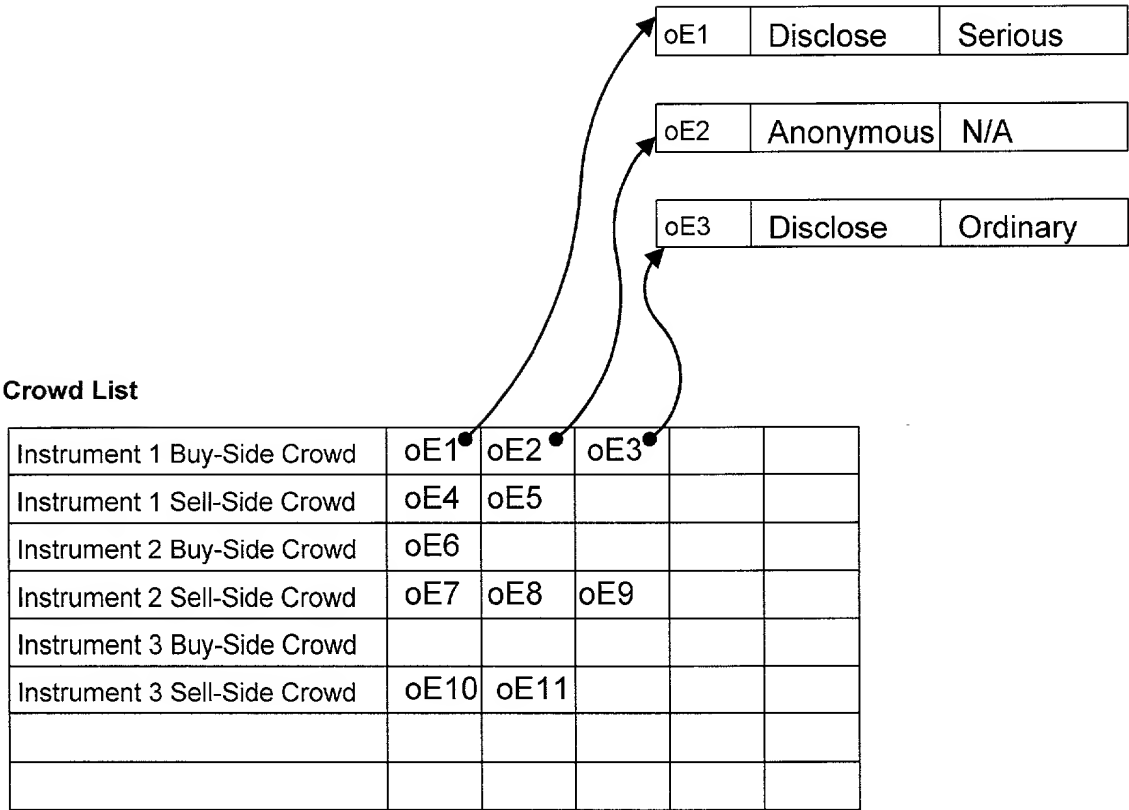


FIG. 45



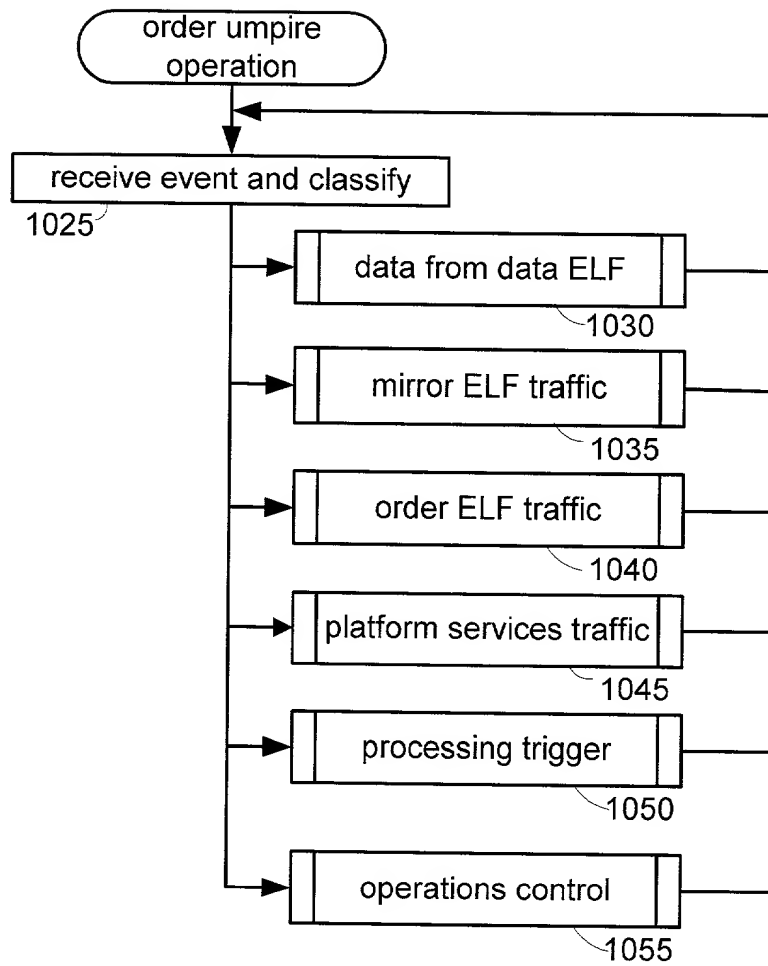
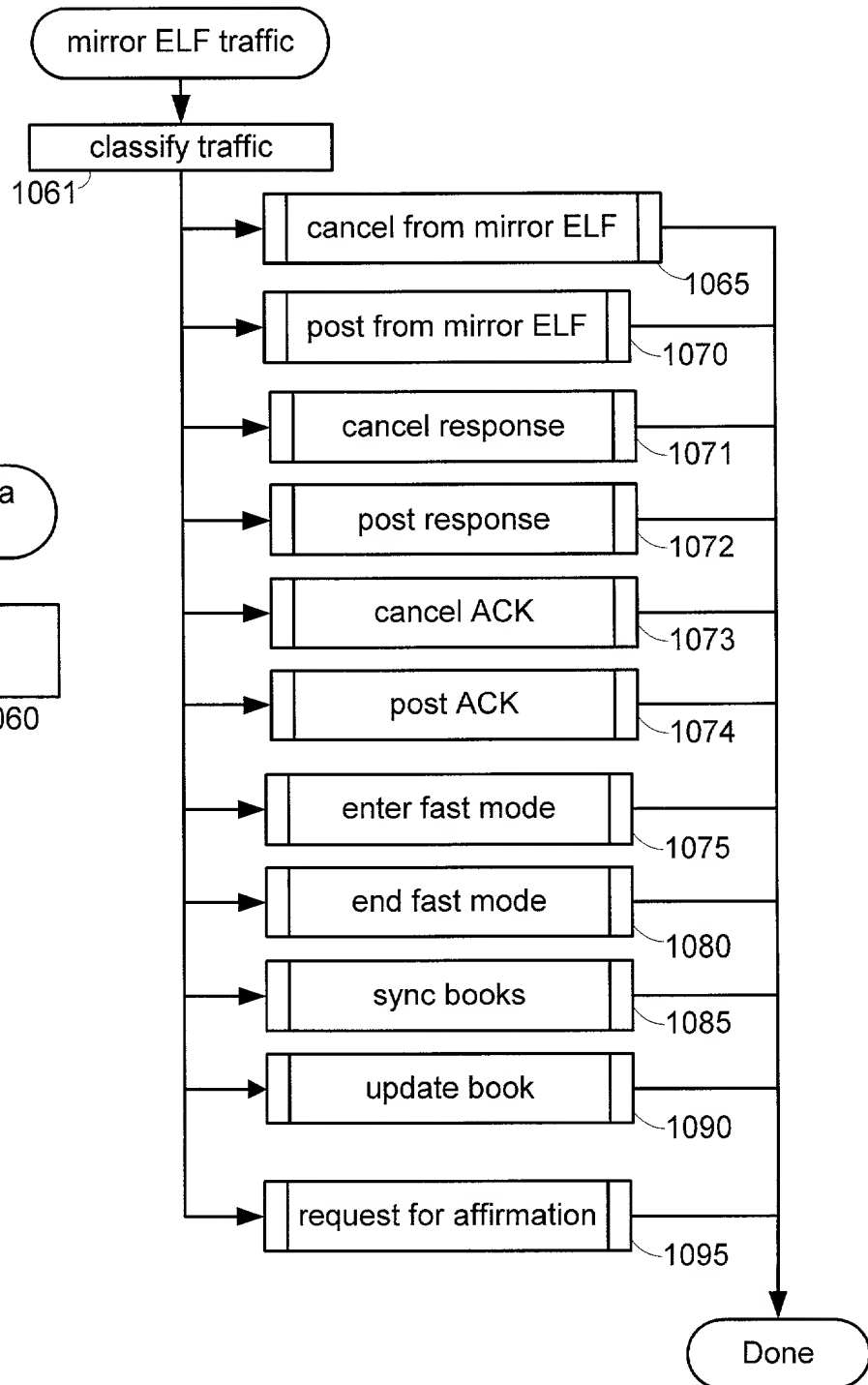
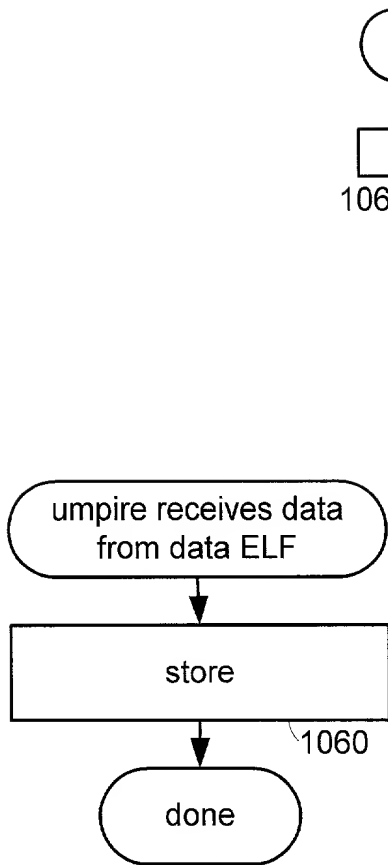


FIG. 46



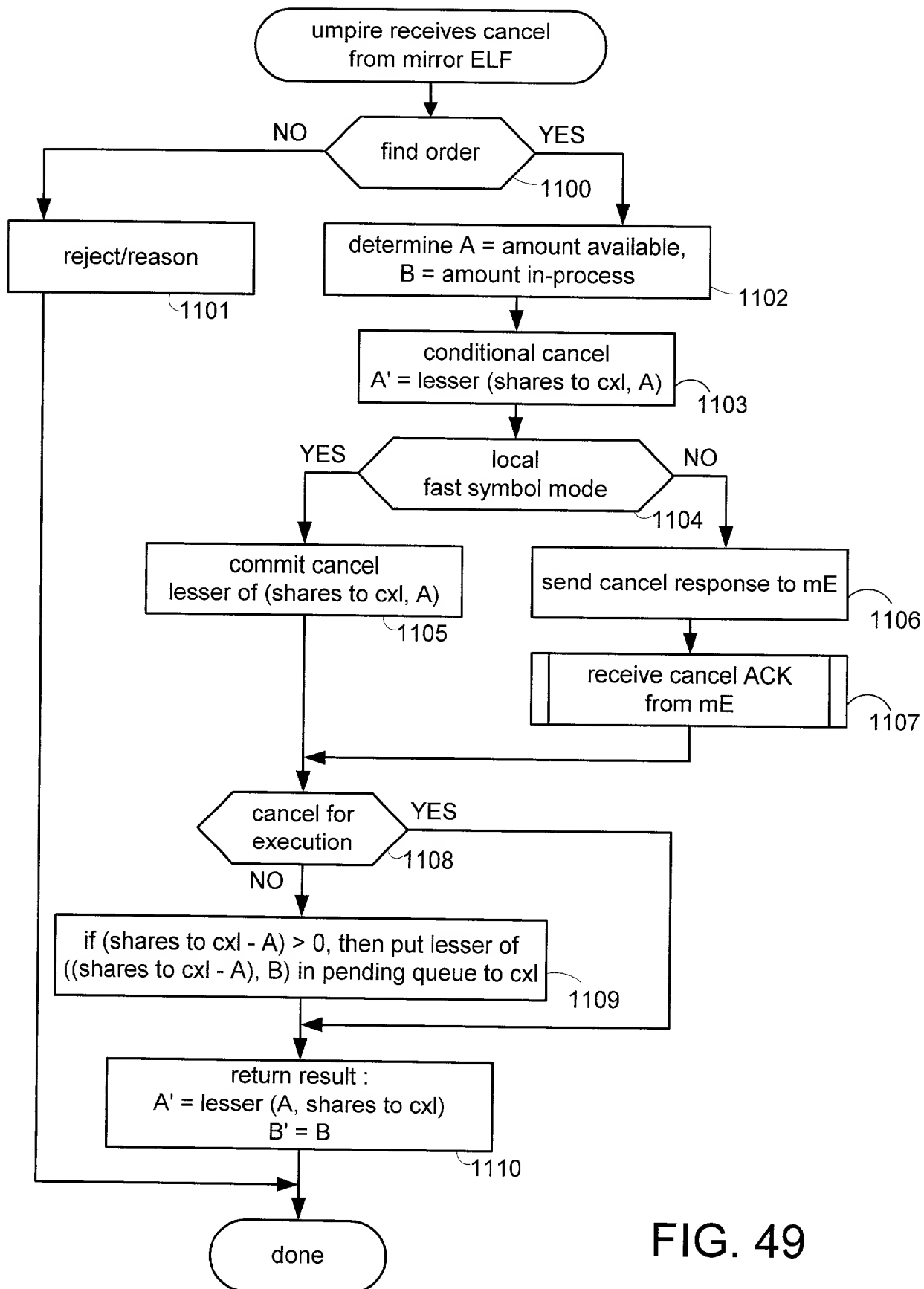


FIG. 49

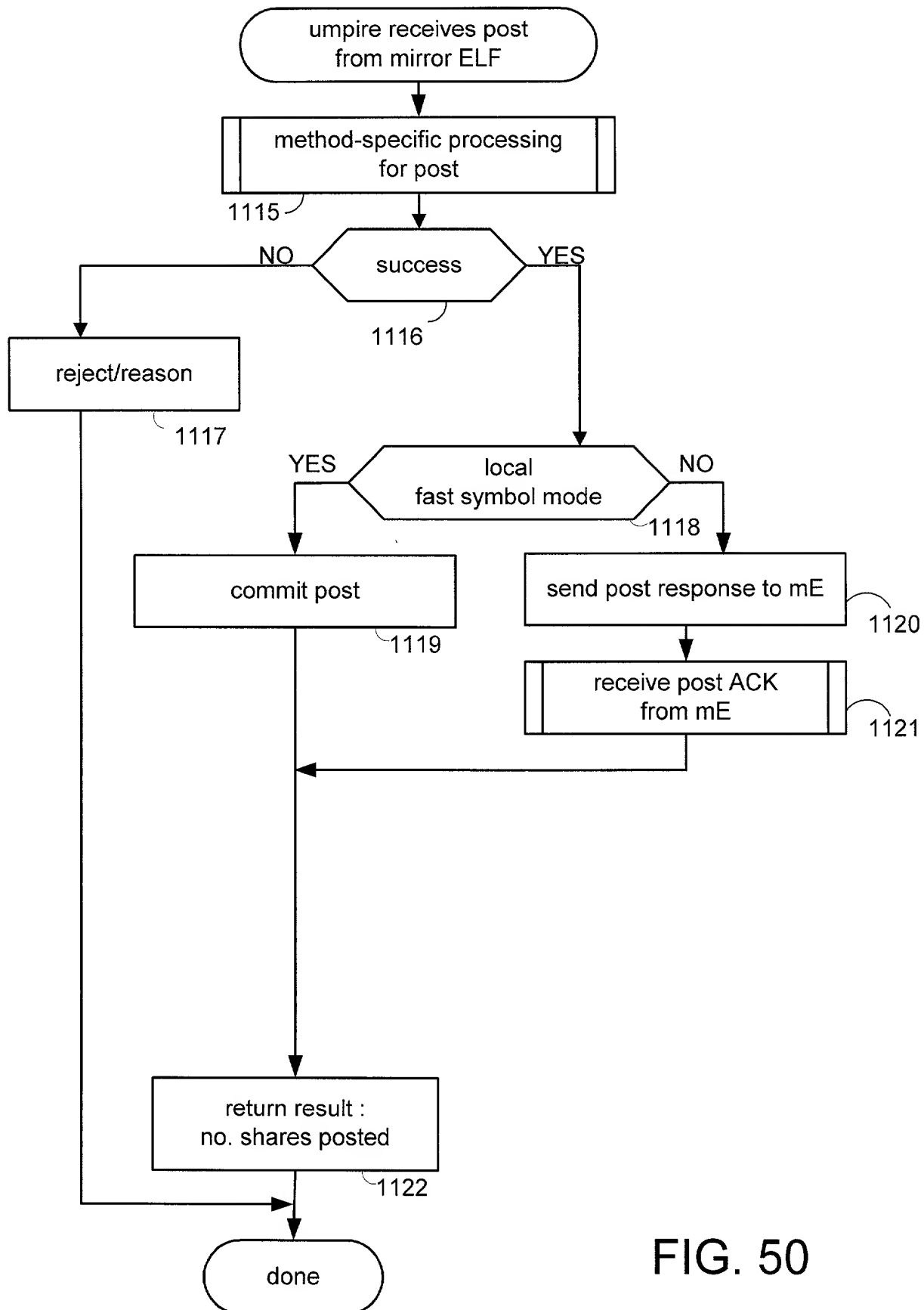


FIG. 50

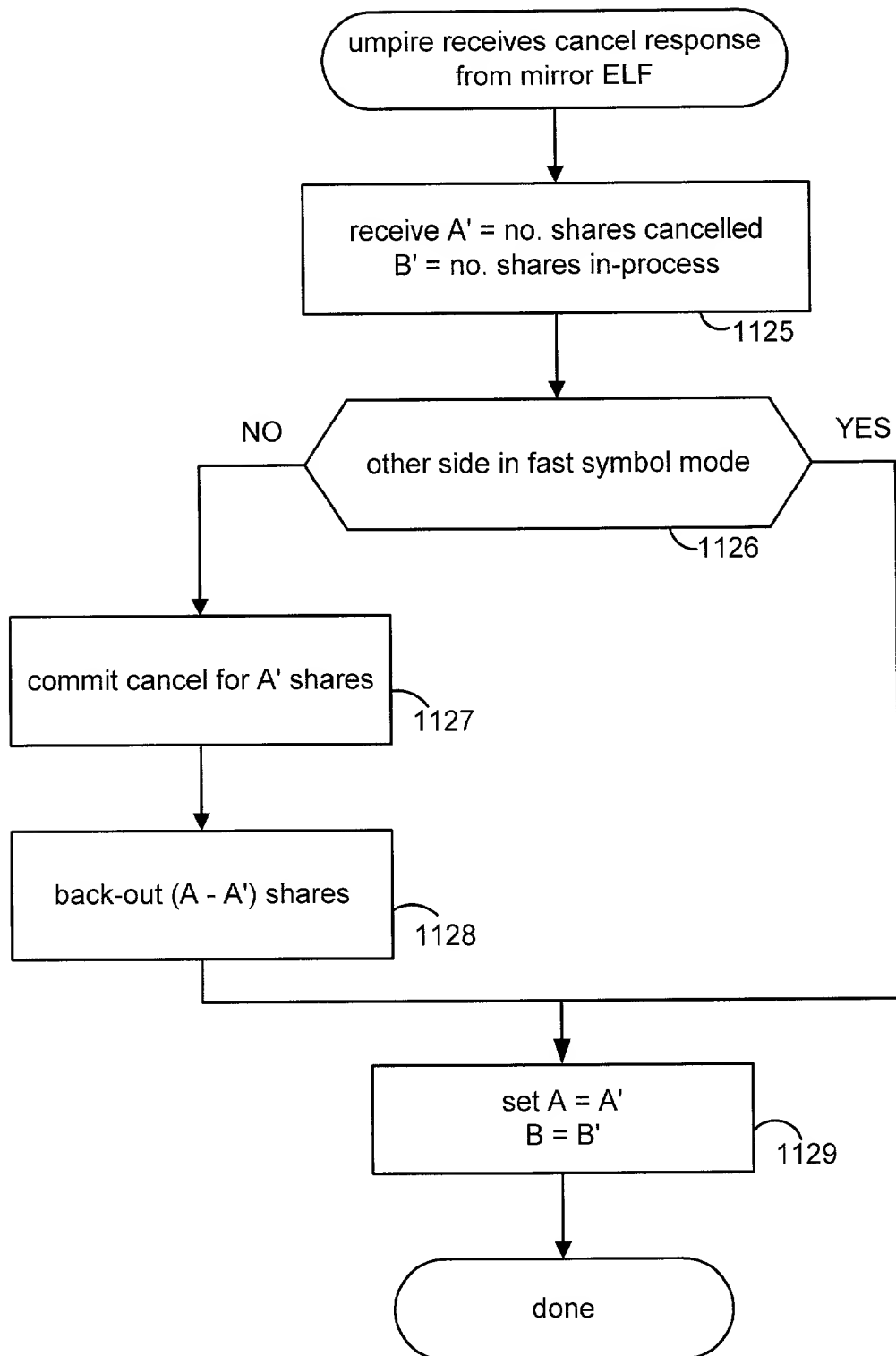


FIG. 51

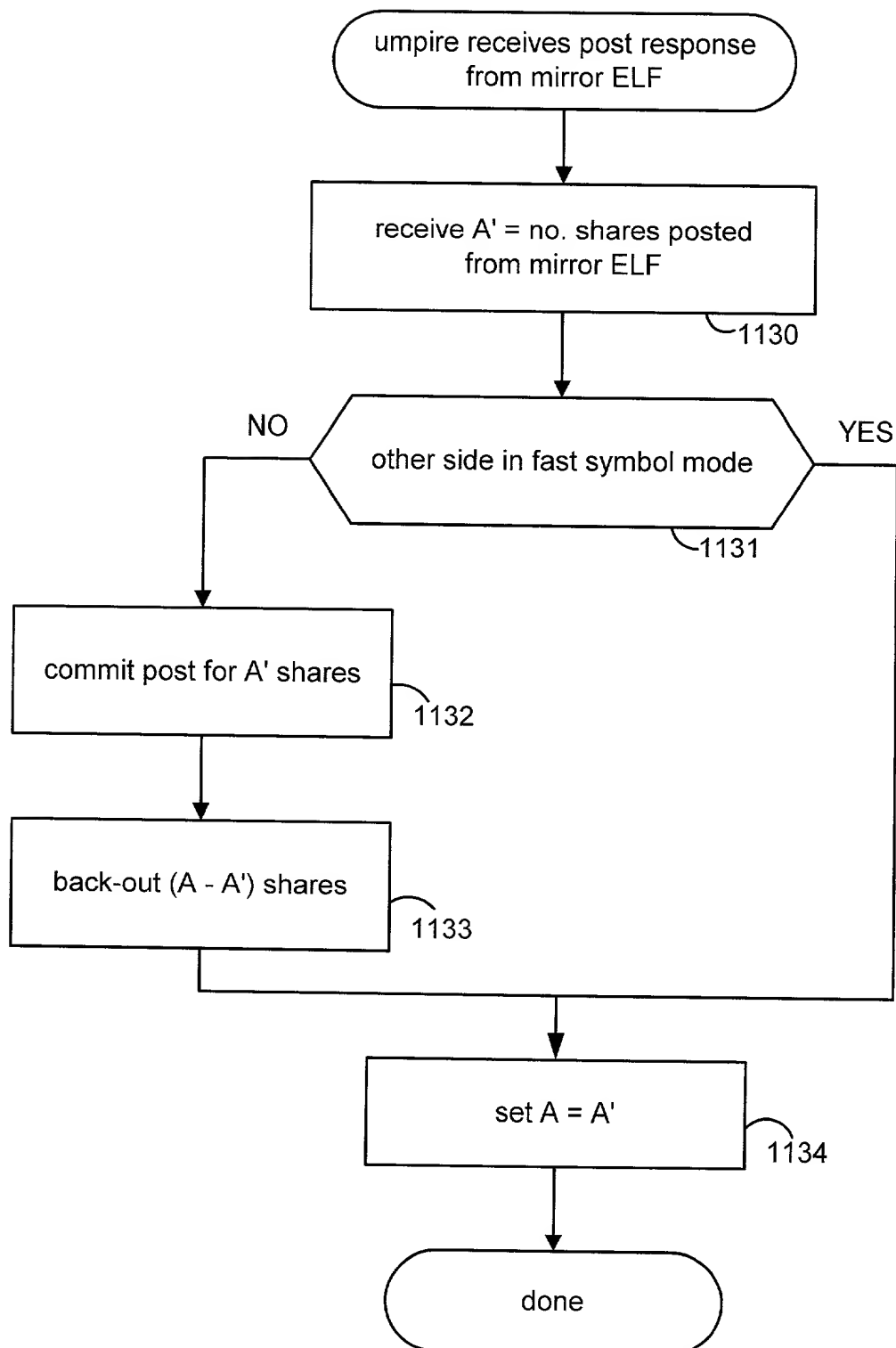


FIG. 52

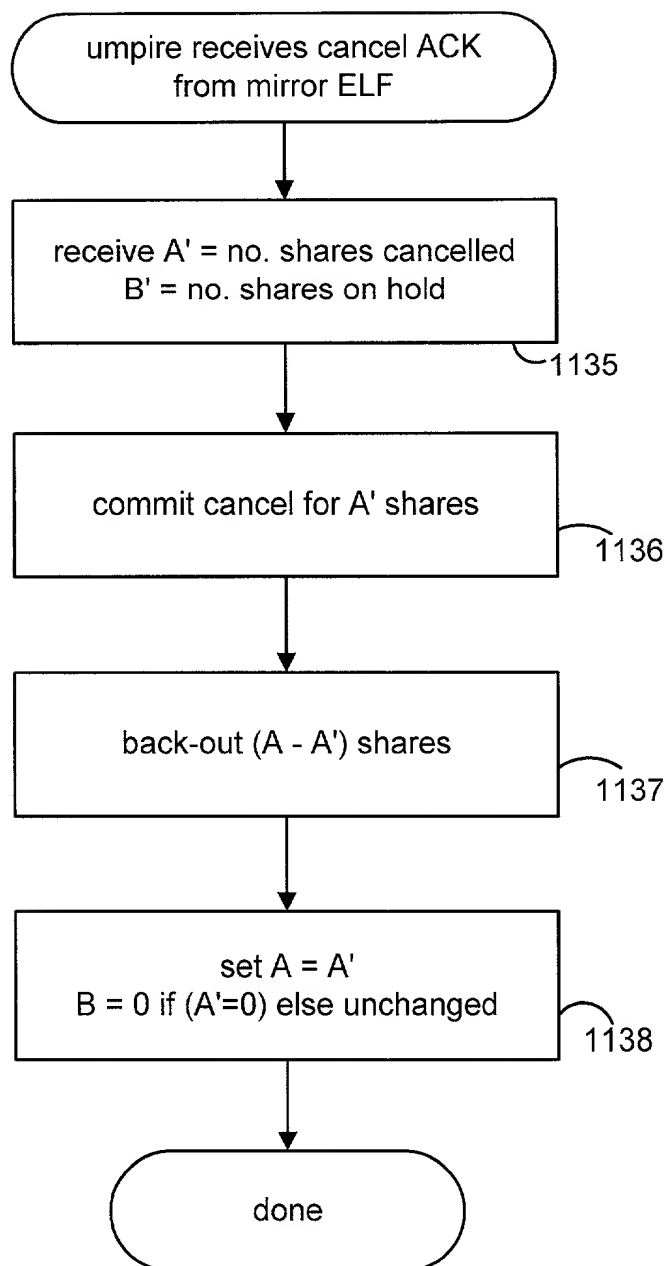


FIG. 53

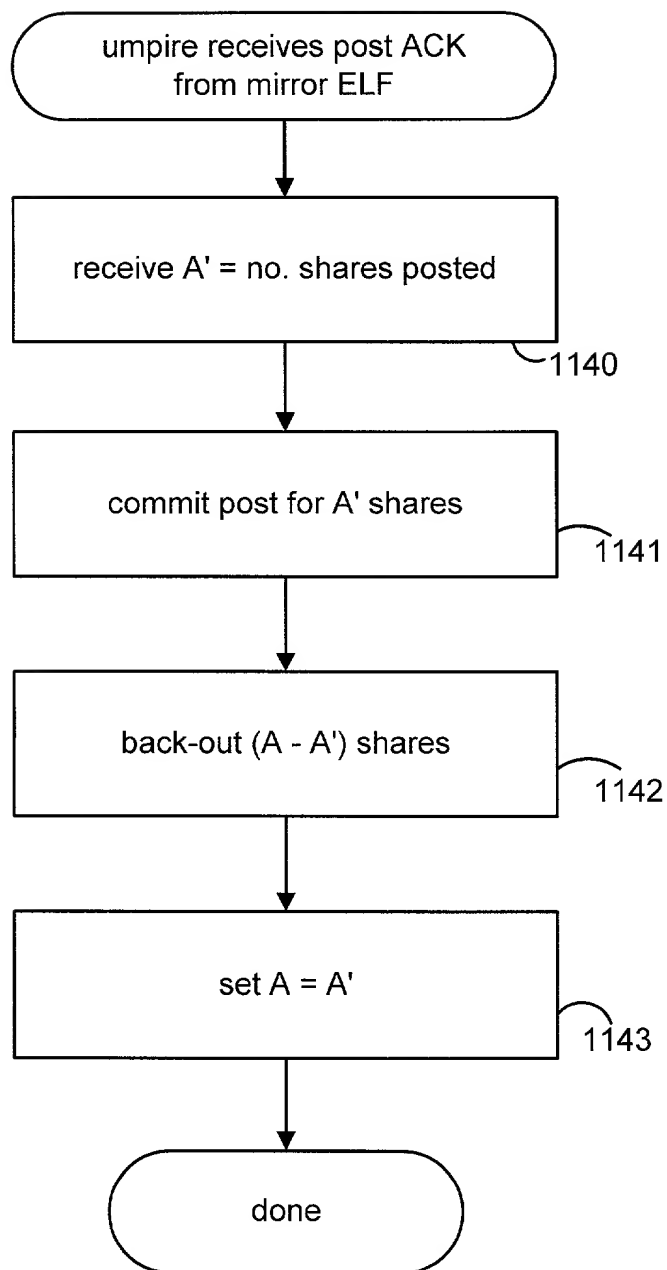


FIG. 54



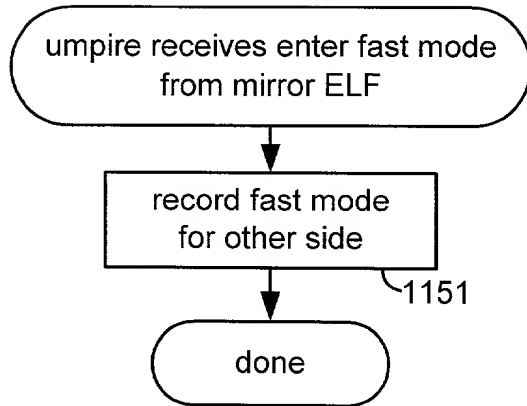


FIG. 55A

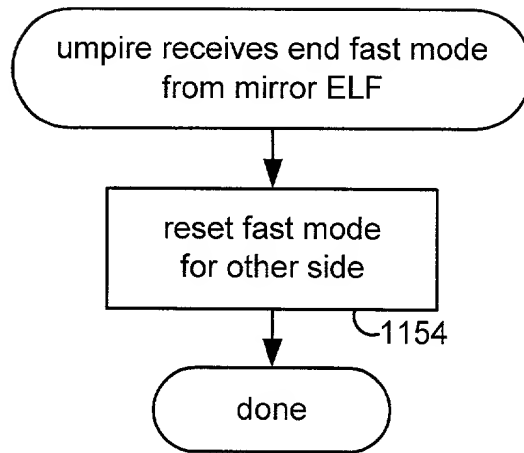


FIG. 55B

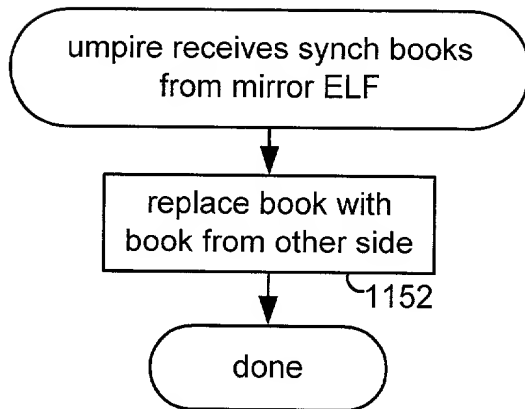


FIG. 56

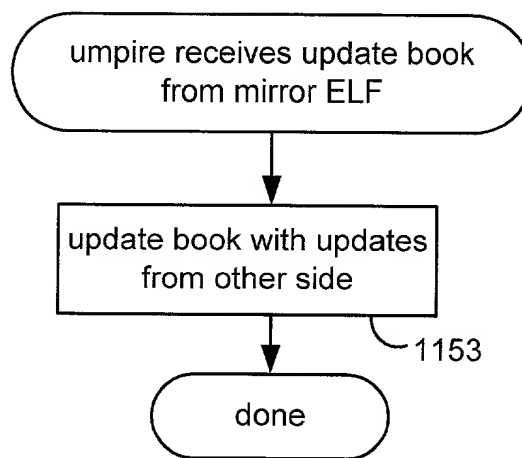


FIG. 57

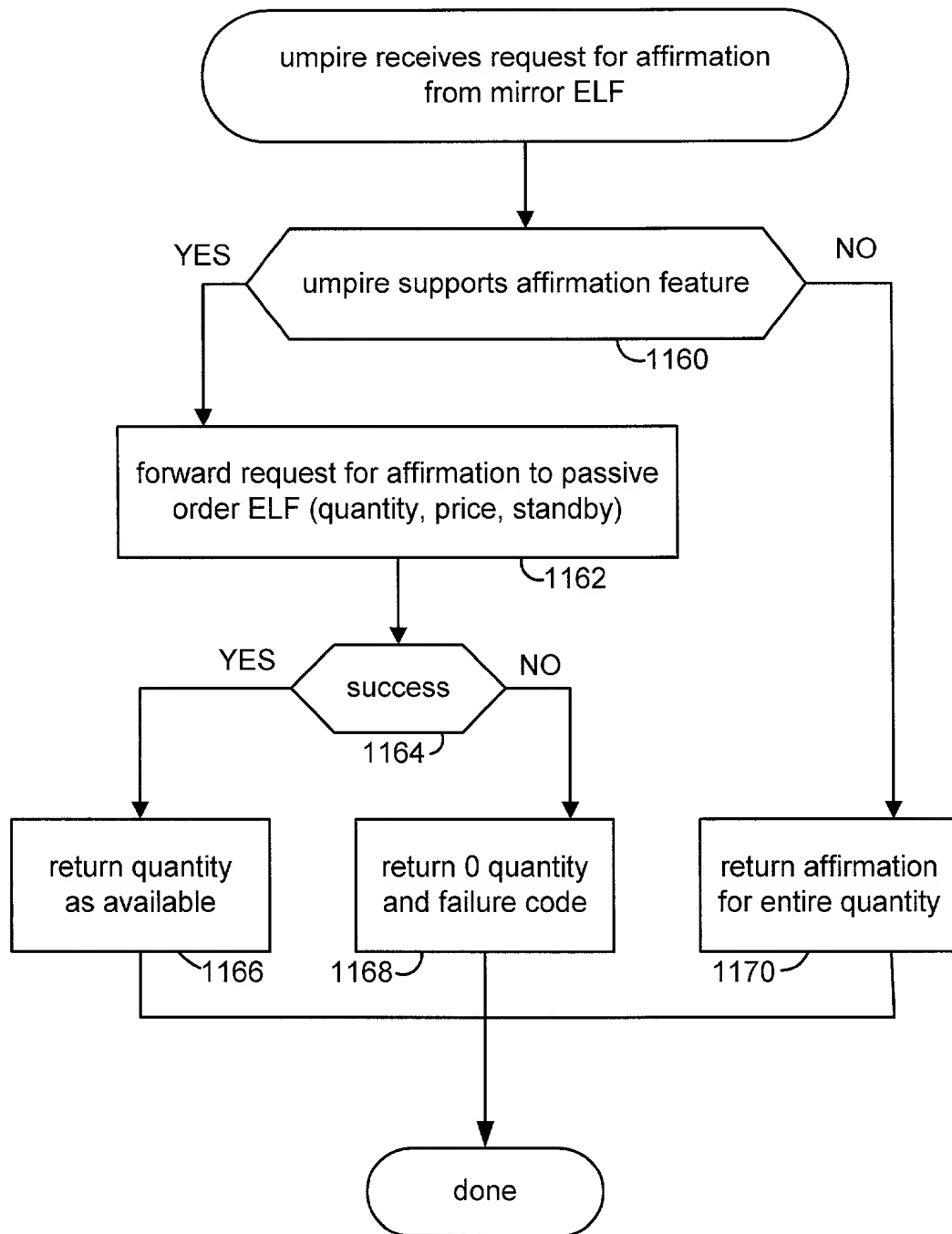
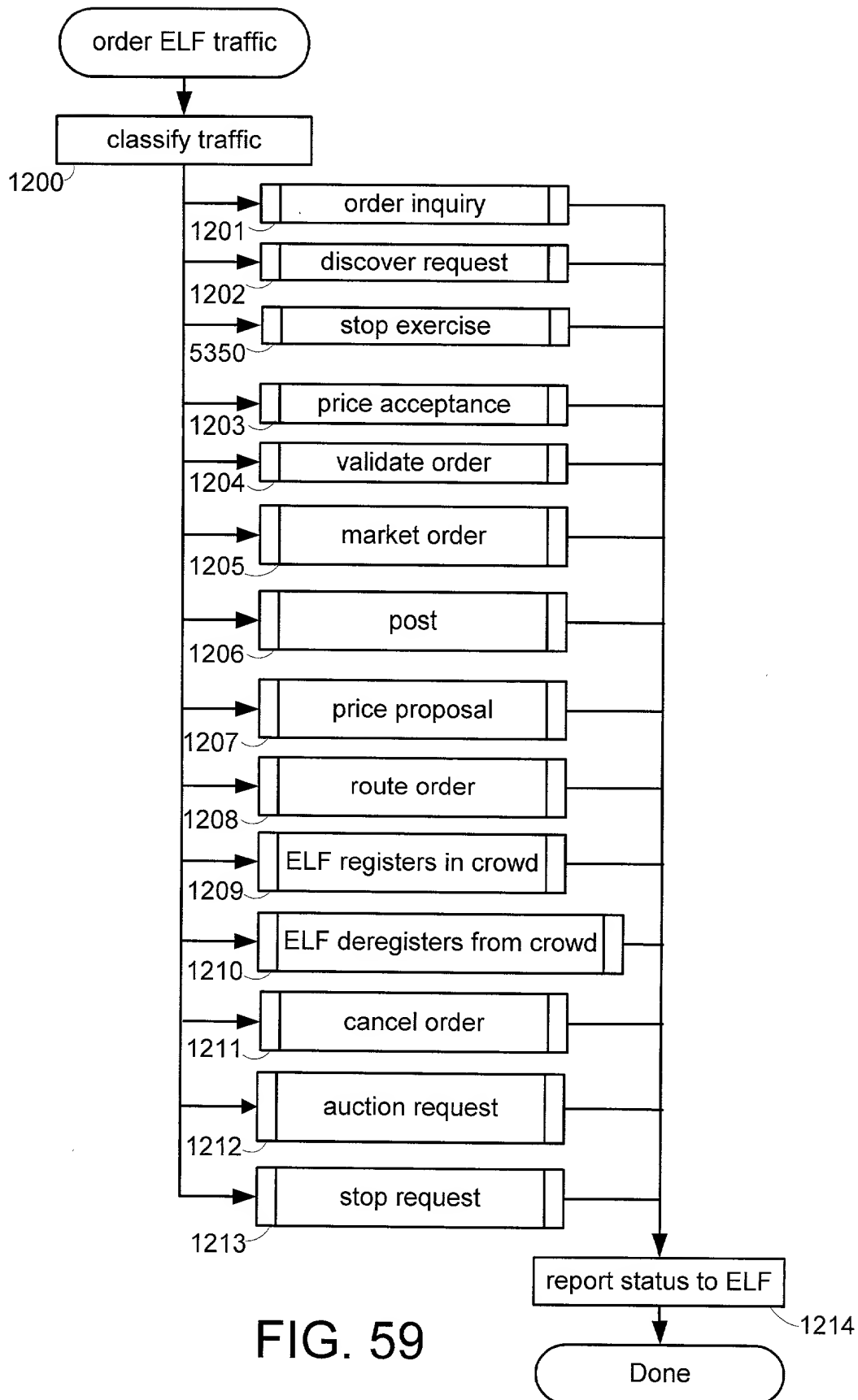


FIG. 58



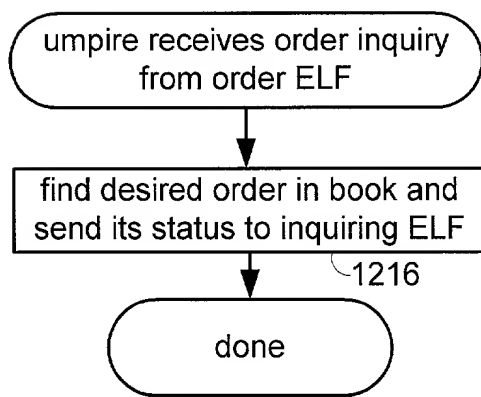


FIG. 60

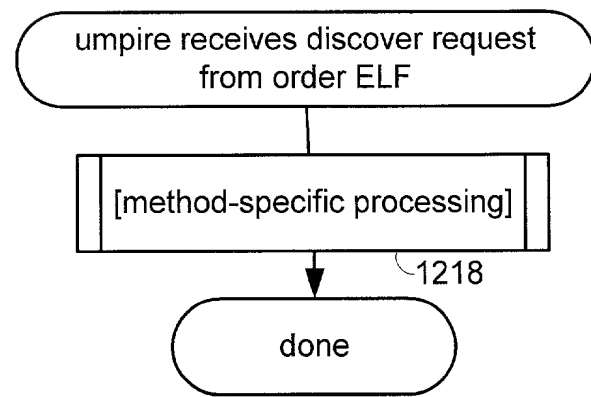


FIG. 61

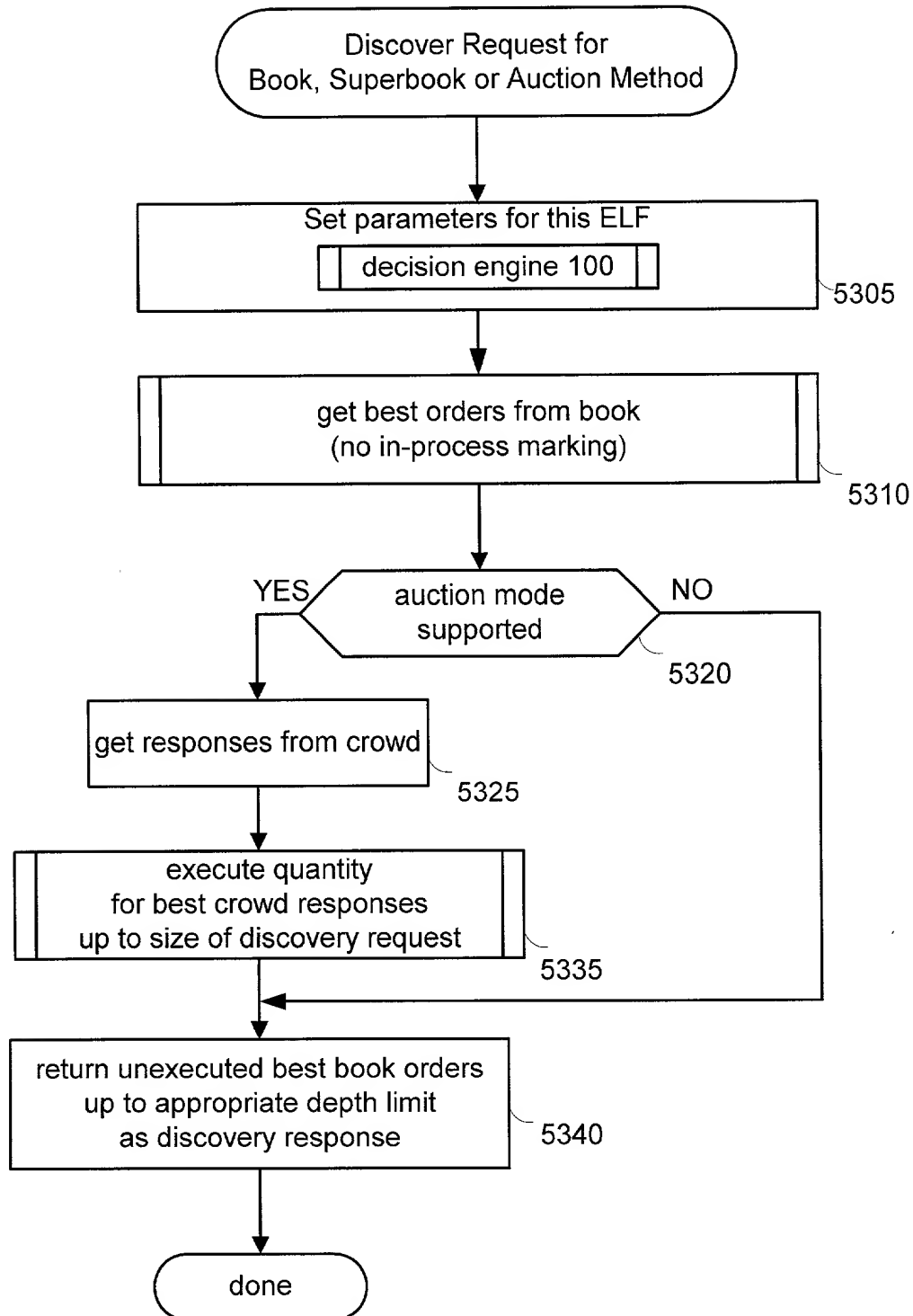


FIG. 62

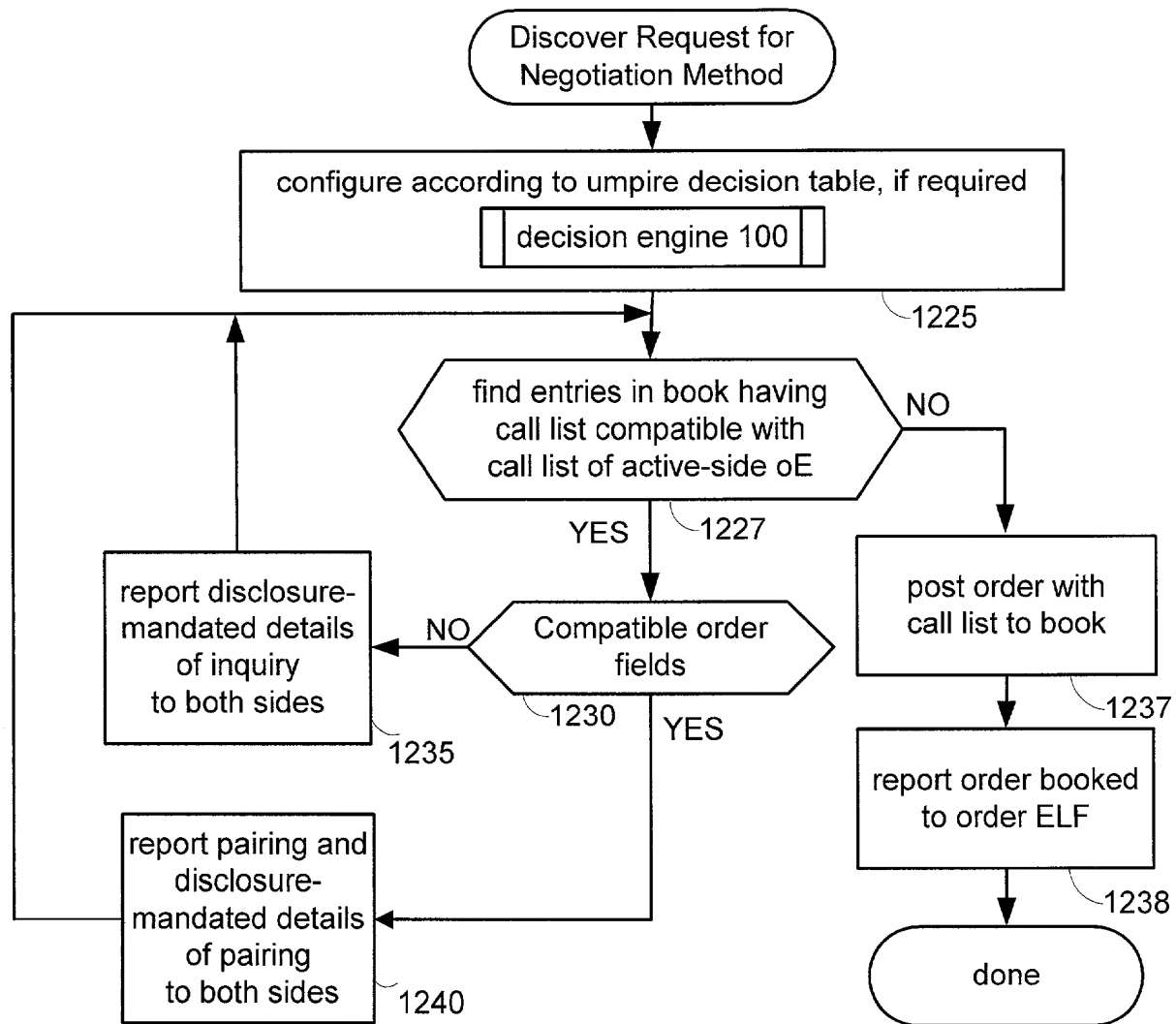


FIG. 63

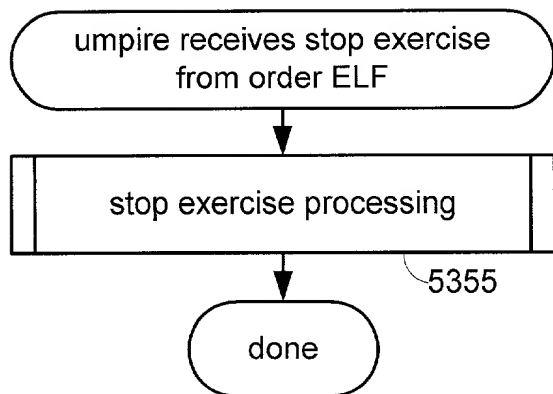


FIG. 64A

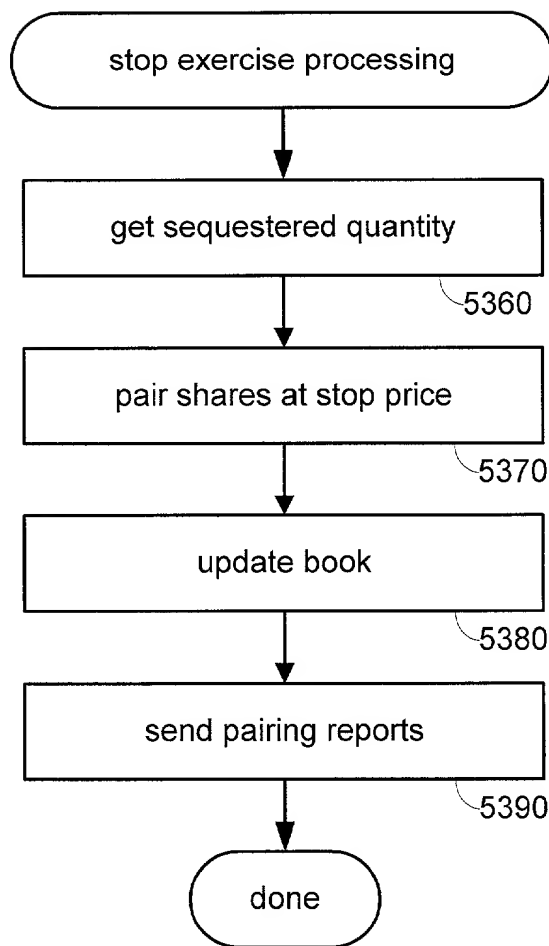


FIG. 64B

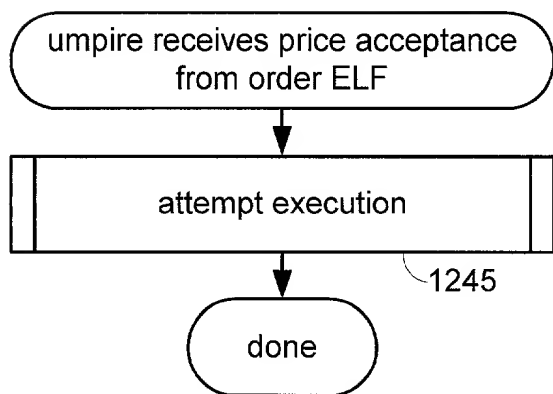
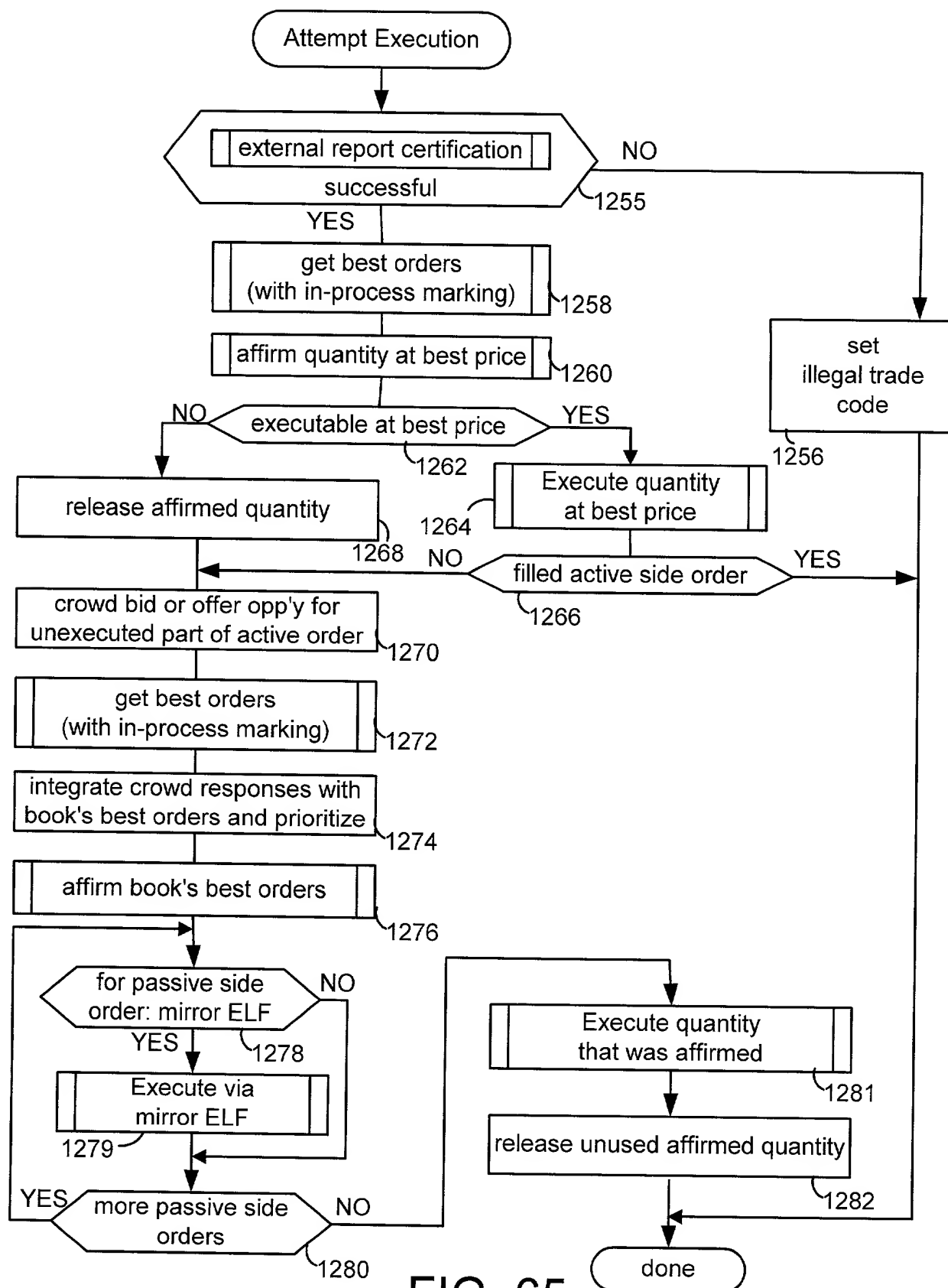


FIG. 64C





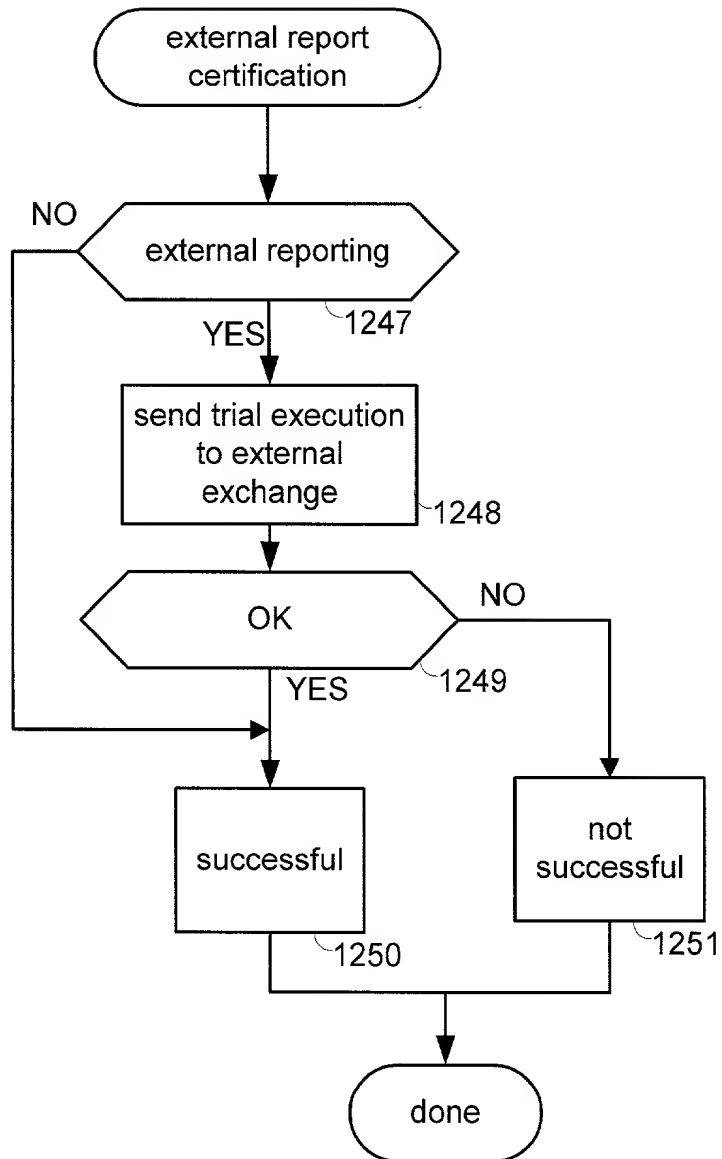


FIG. 66

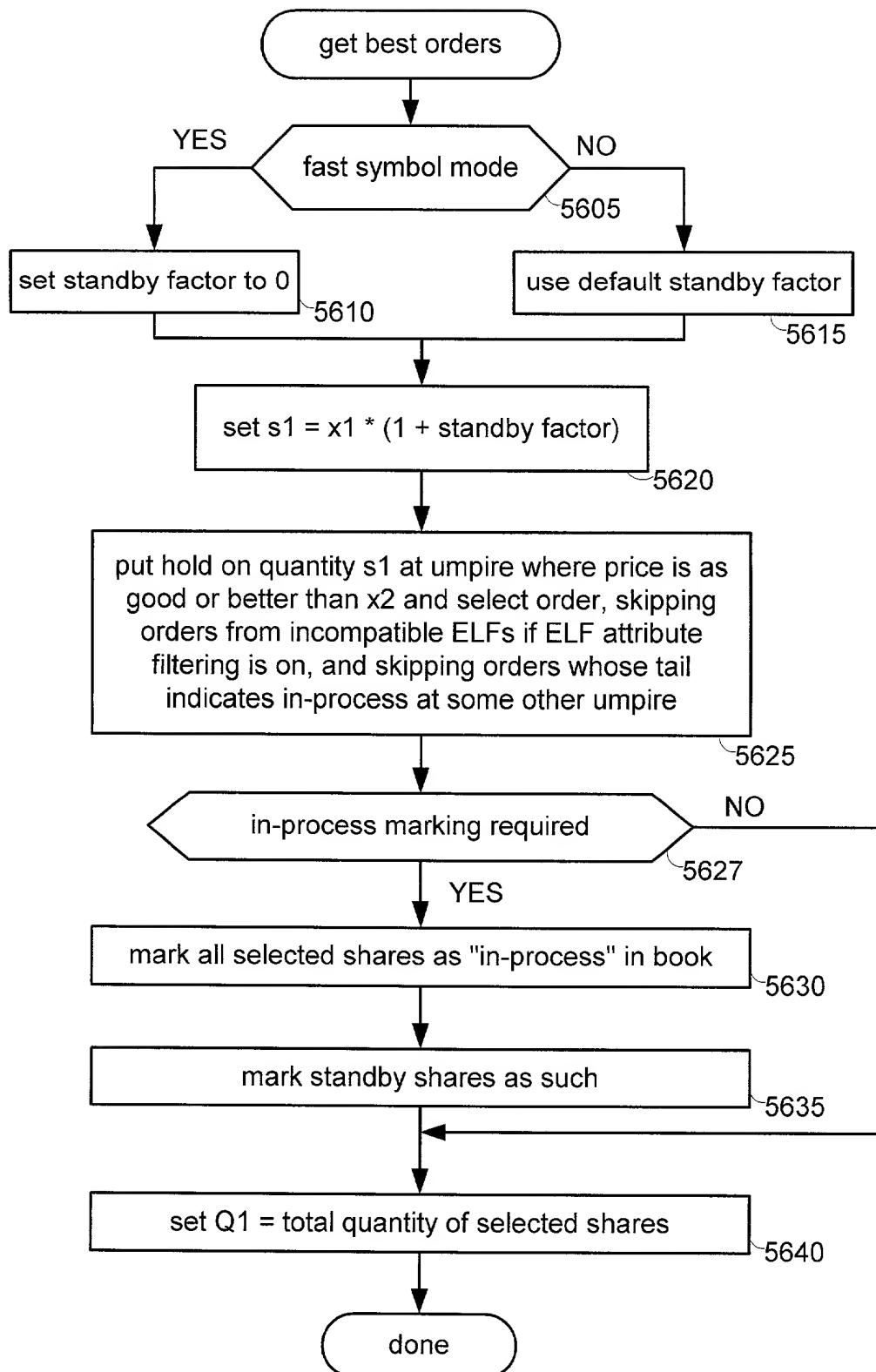
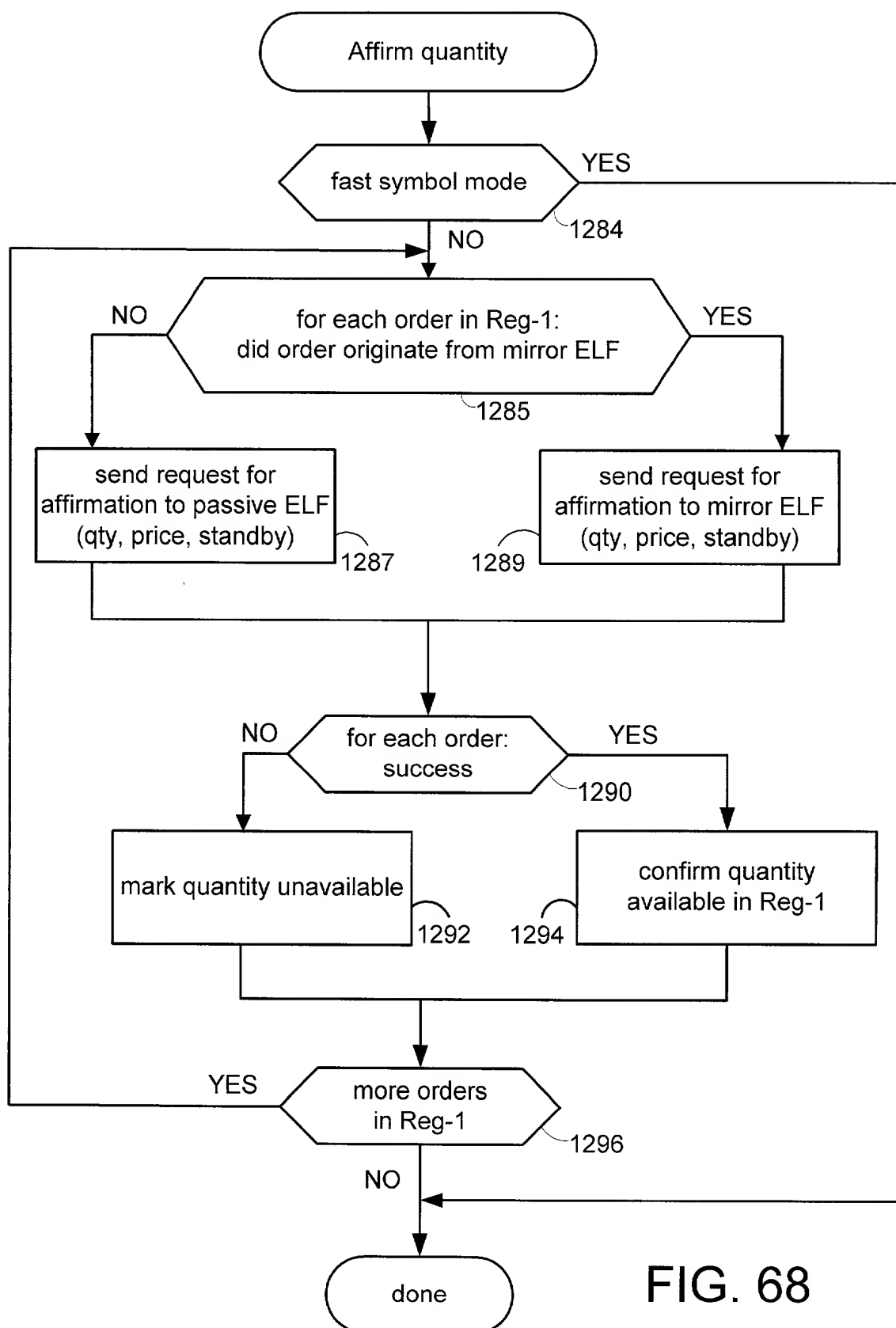


FIG. 67



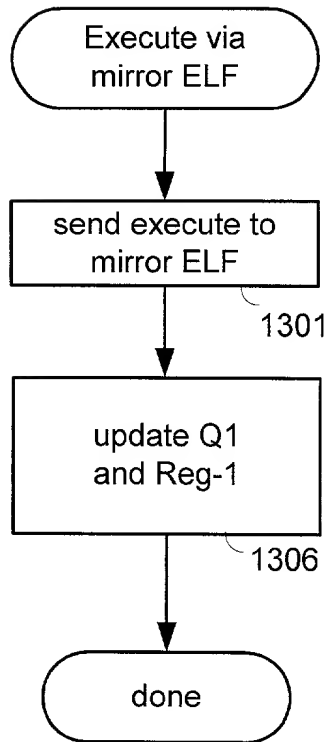


FIG. 69

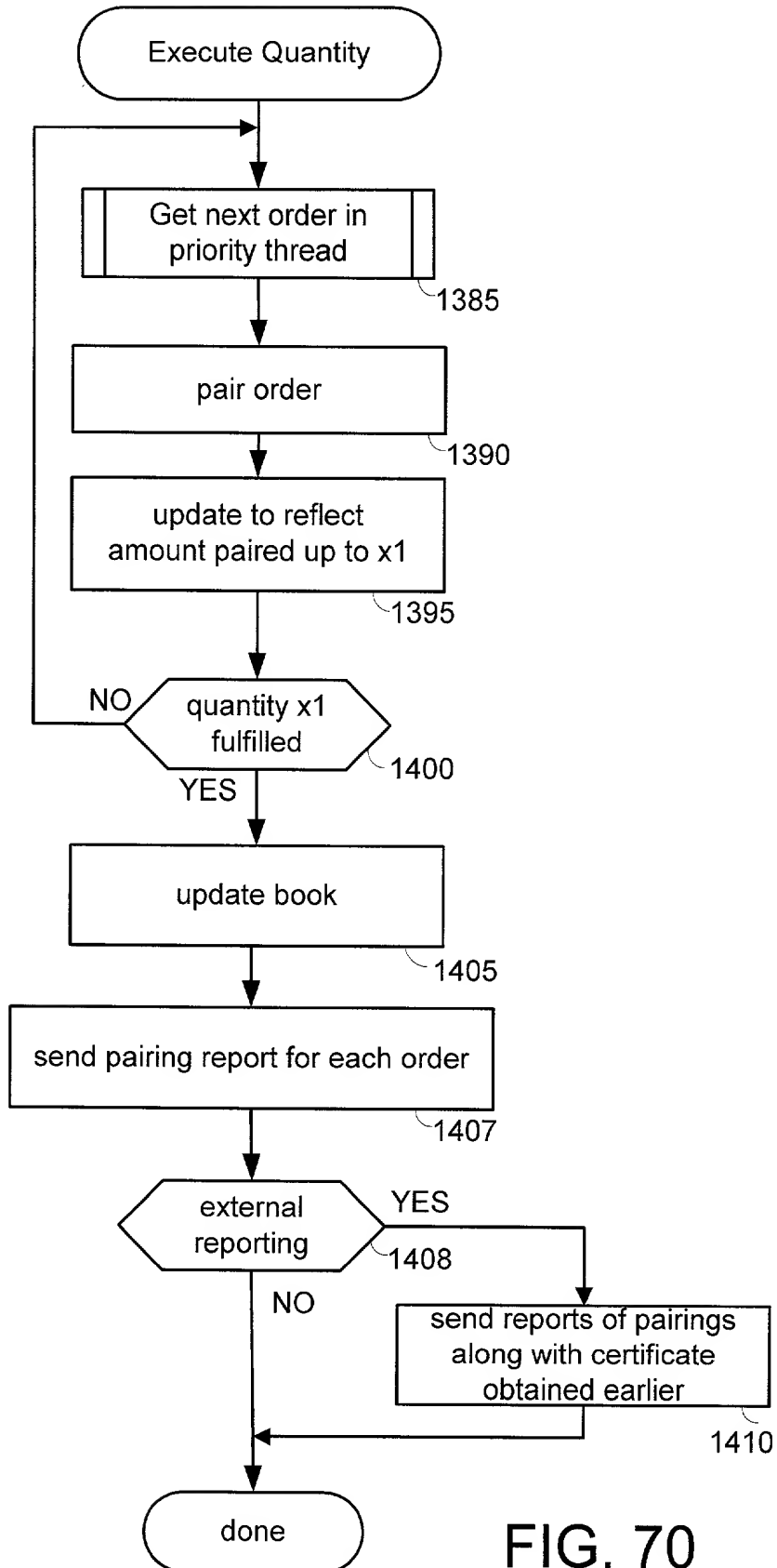


FIG. 70

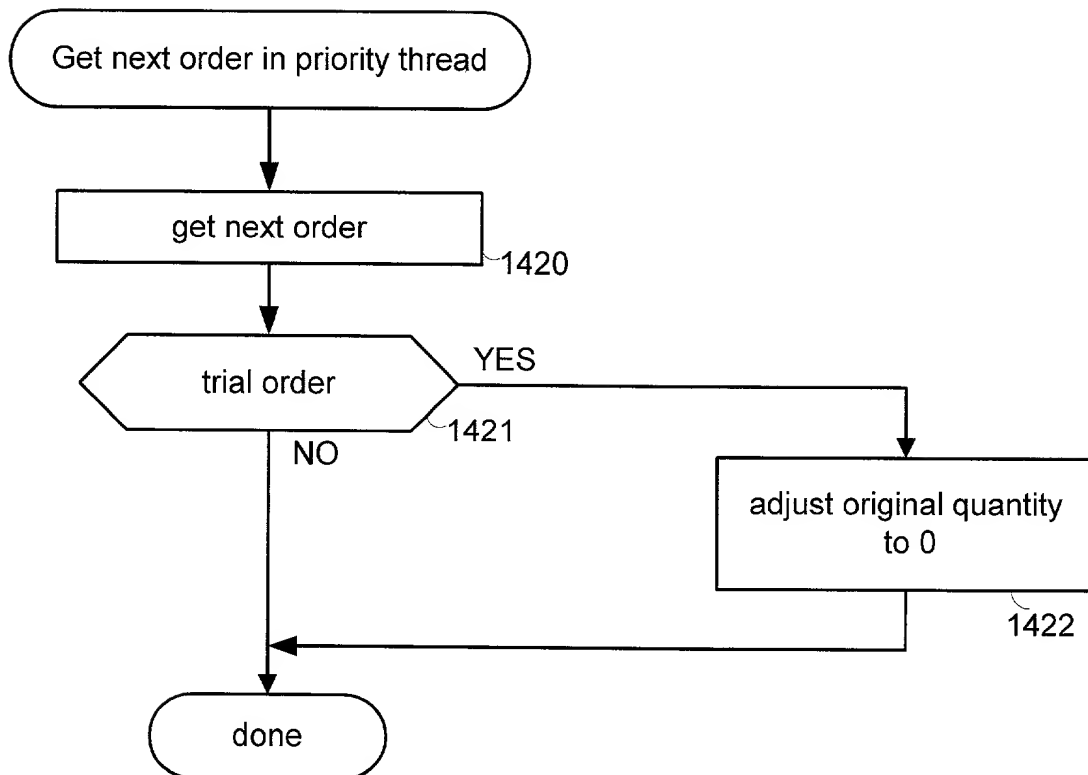


FIG. 71

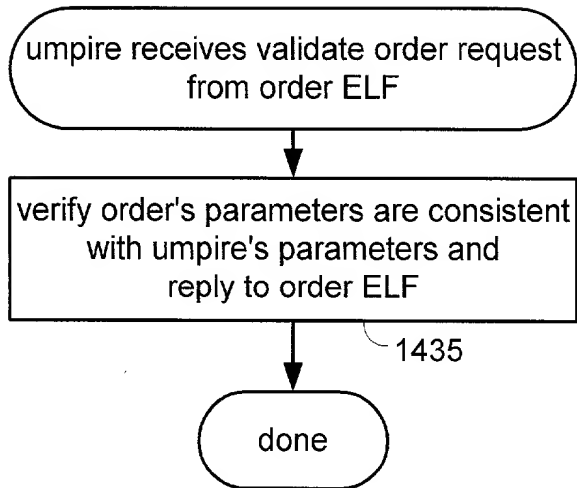


FIG. 72

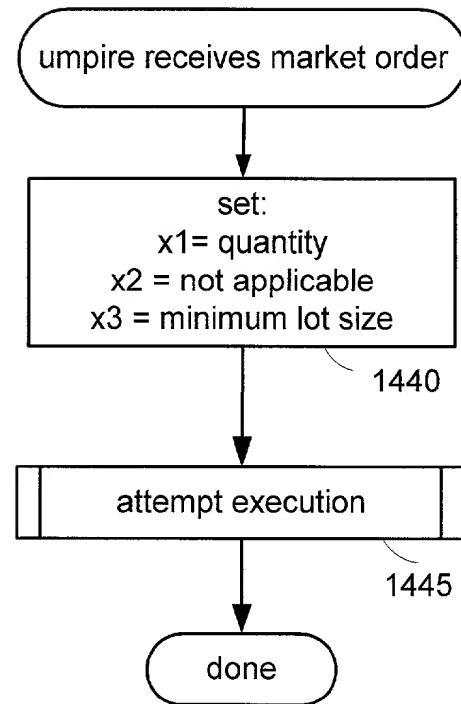


FIG. 73

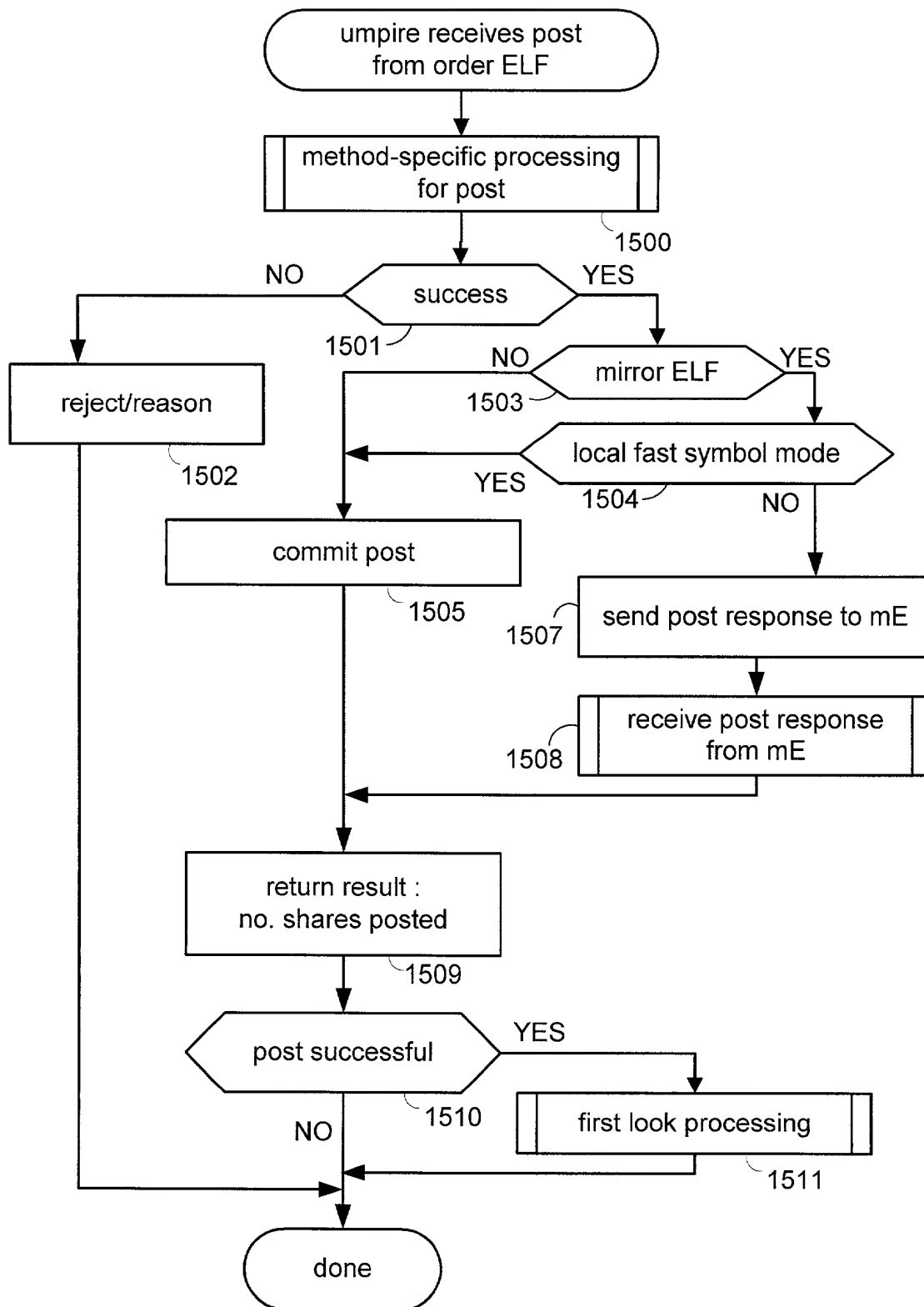


FIG. 74

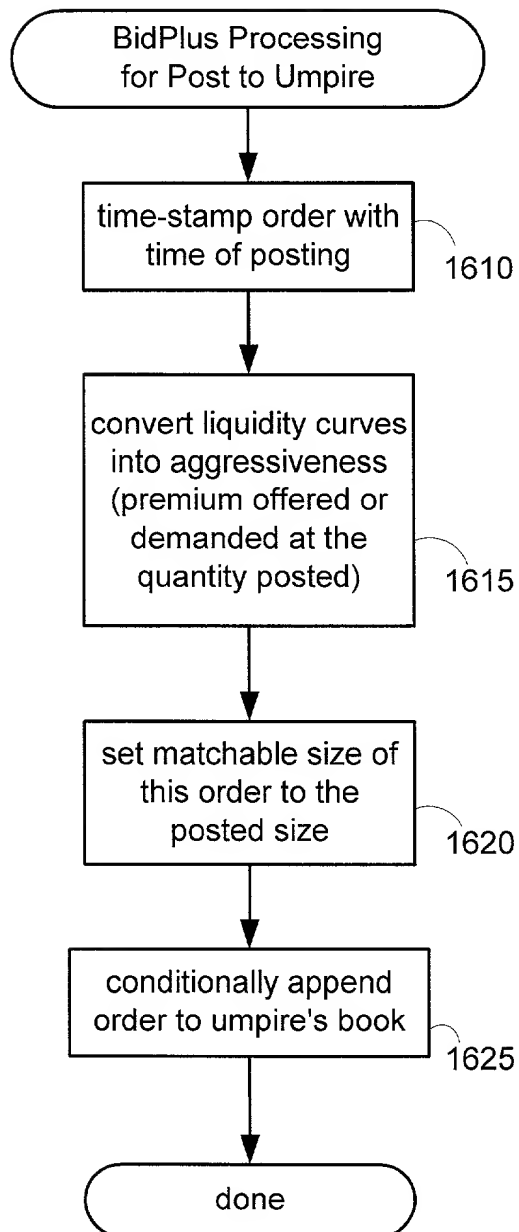


FIG. 75



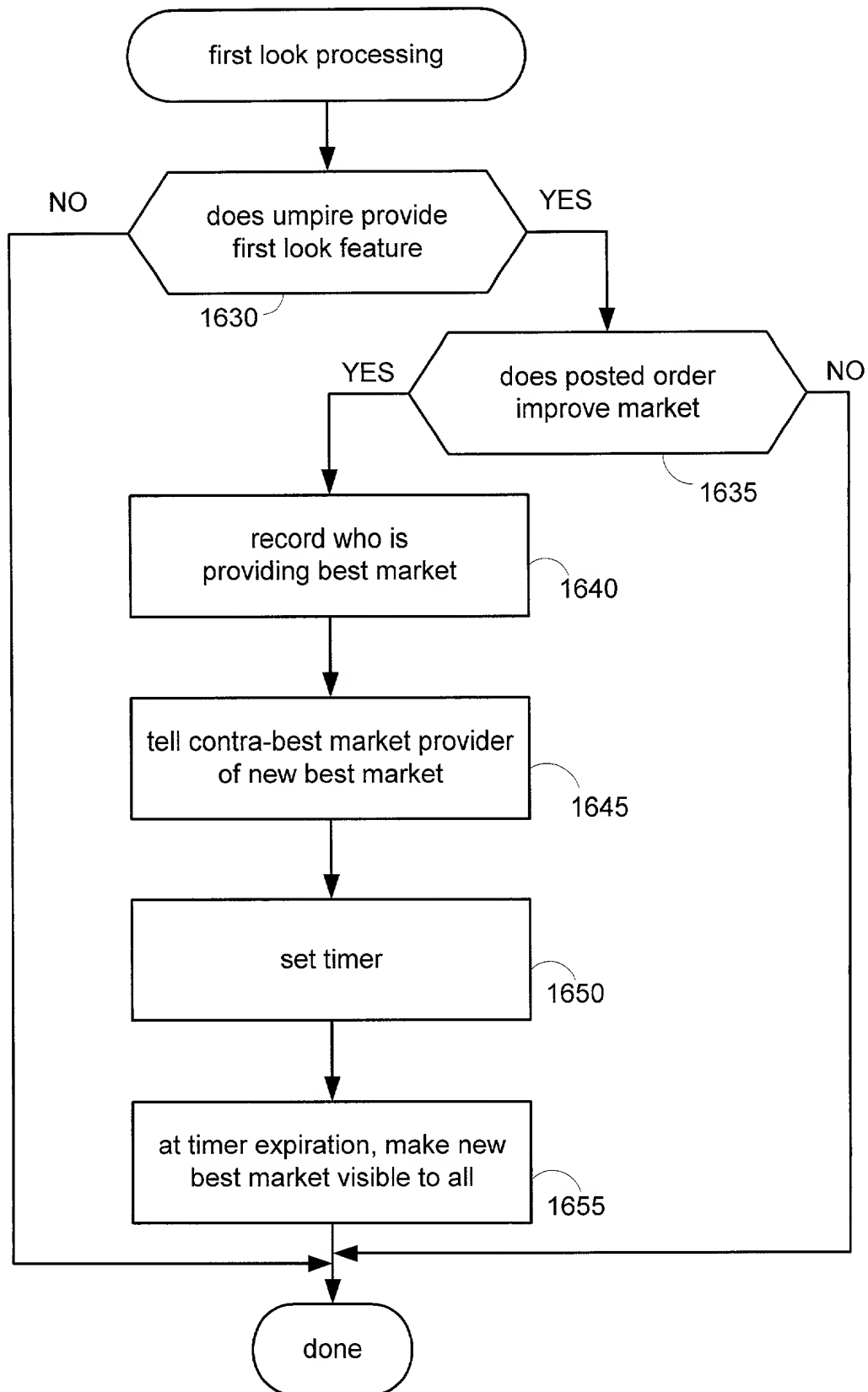


FIG. 76

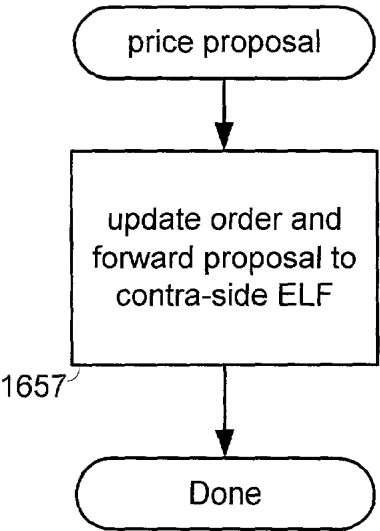


FIG. 77

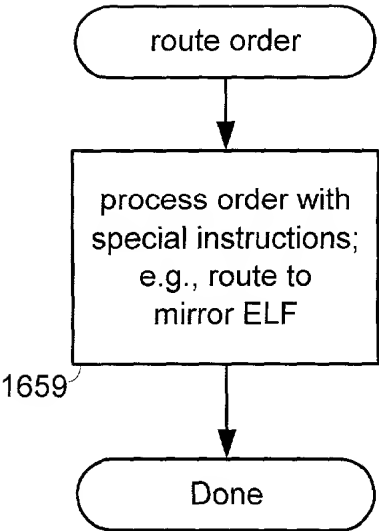


FIG. 78

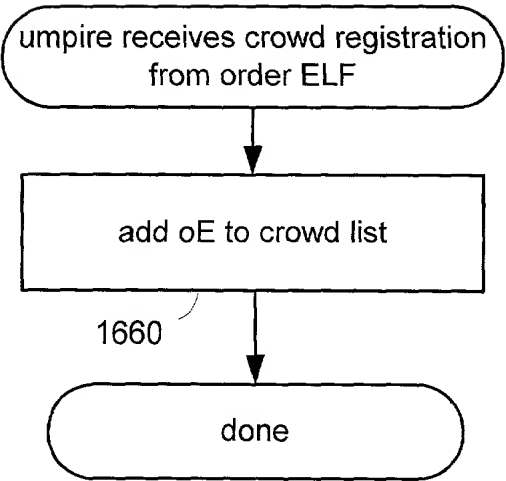


FIG. 79

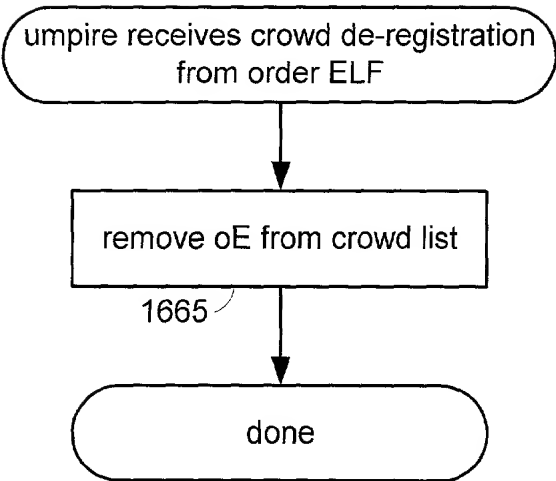


FIG. 80

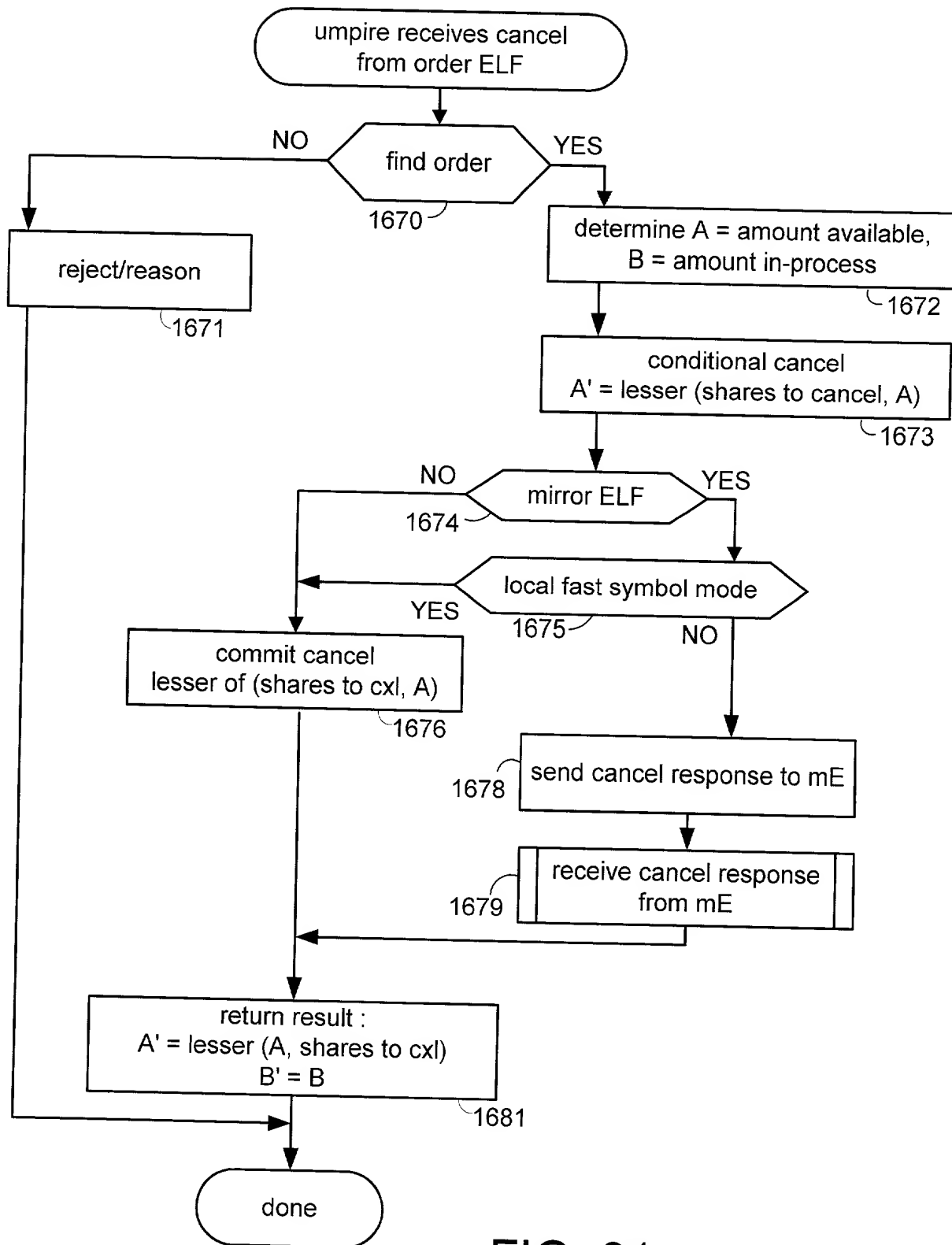


FIG. 81

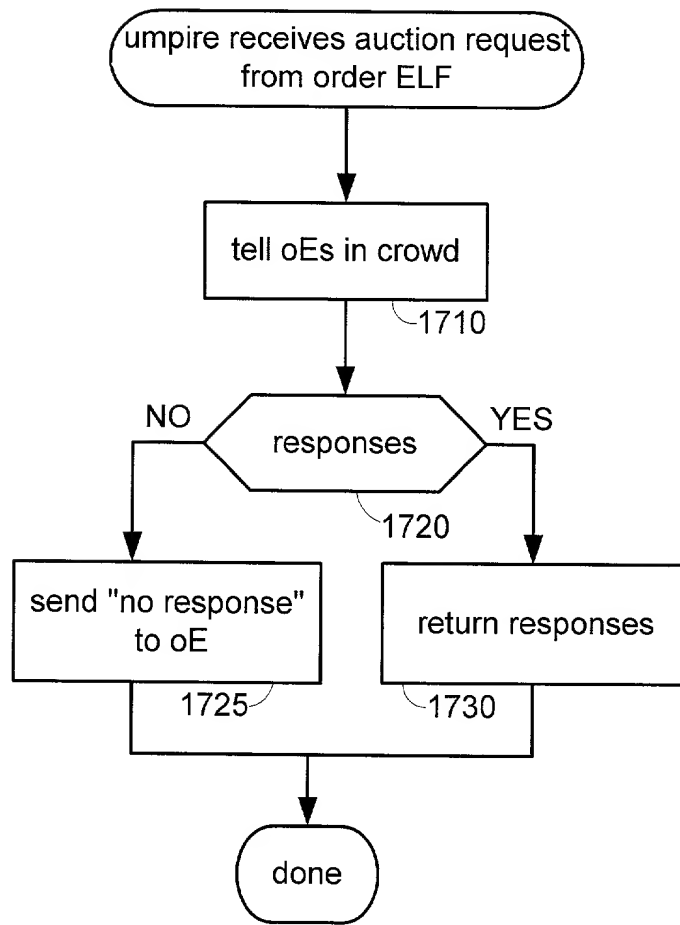


FIG. 82

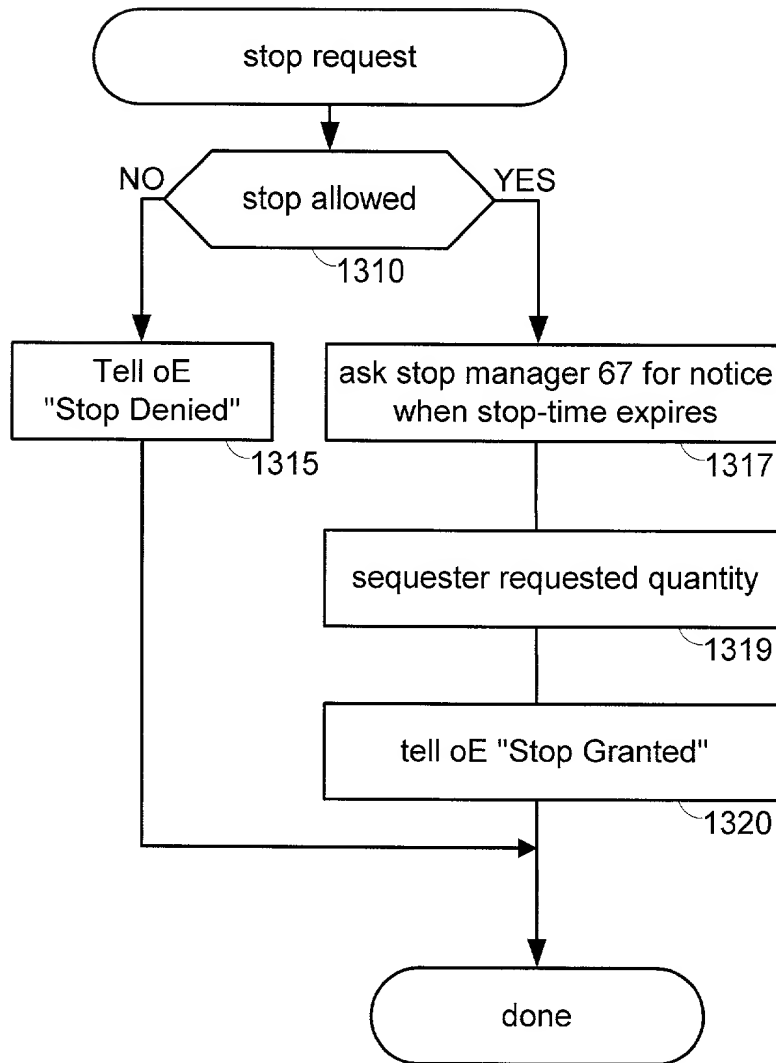


FIG. 83

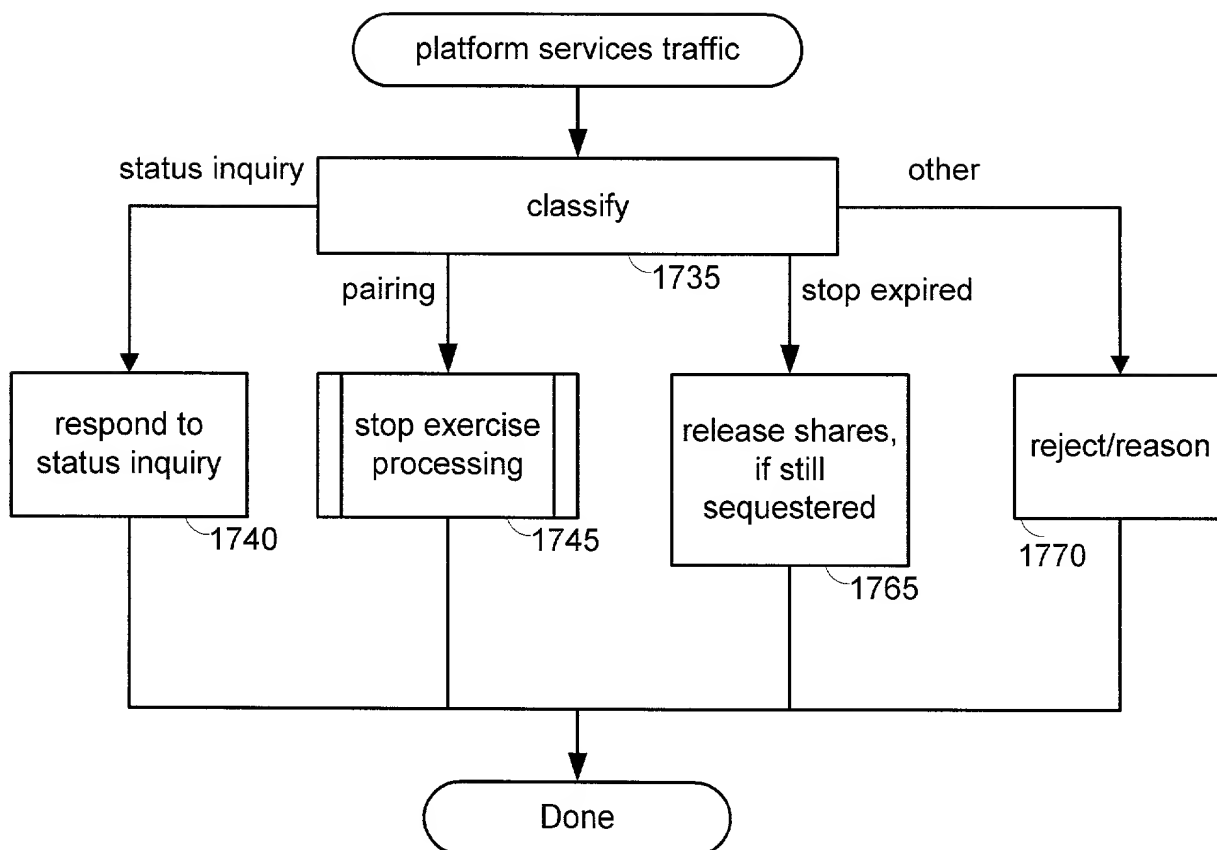


FIG. 84

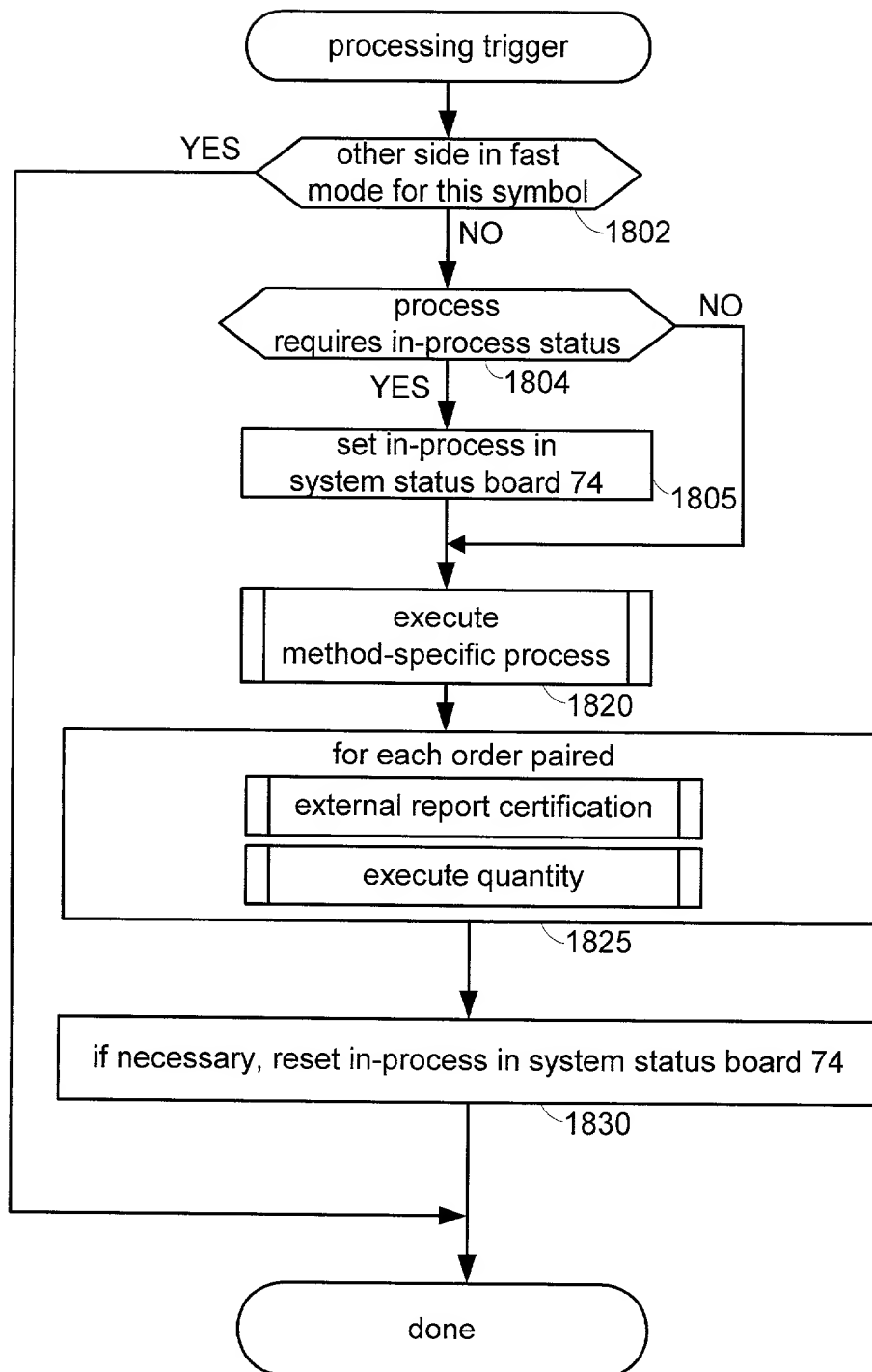


FIG. 85

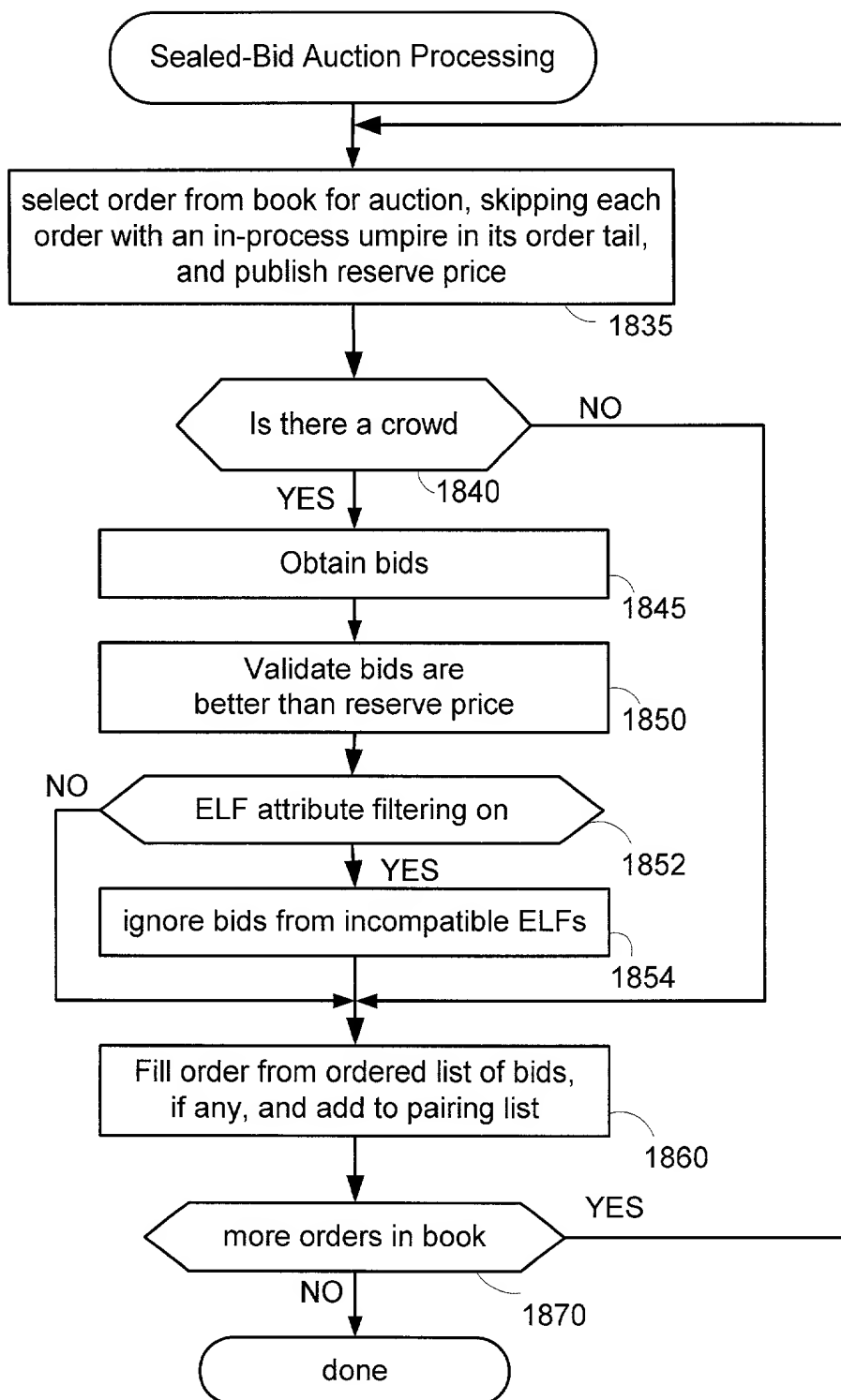


FIG. 86



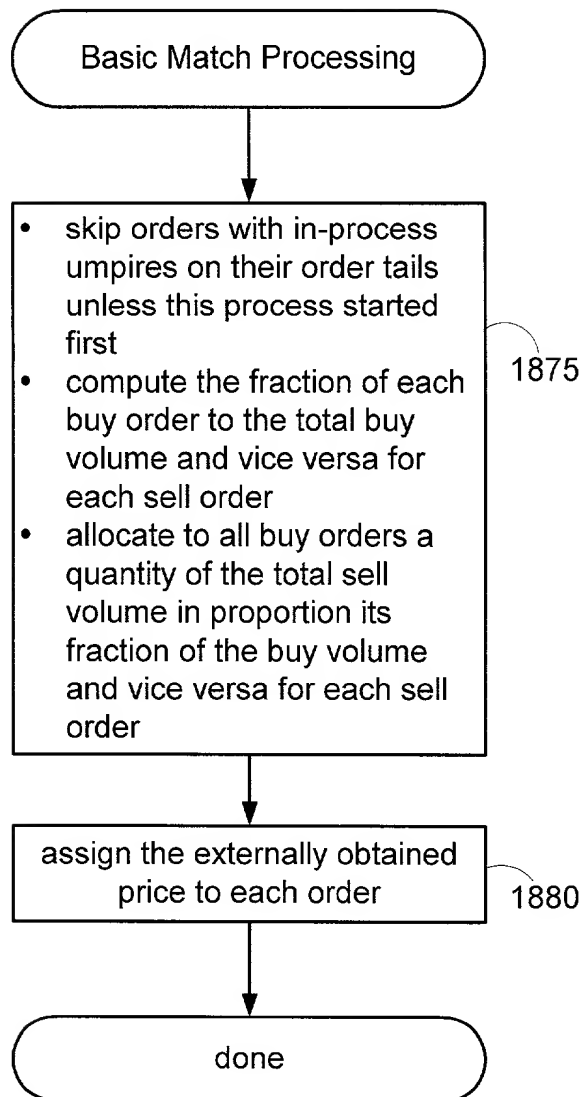


FIG. 87

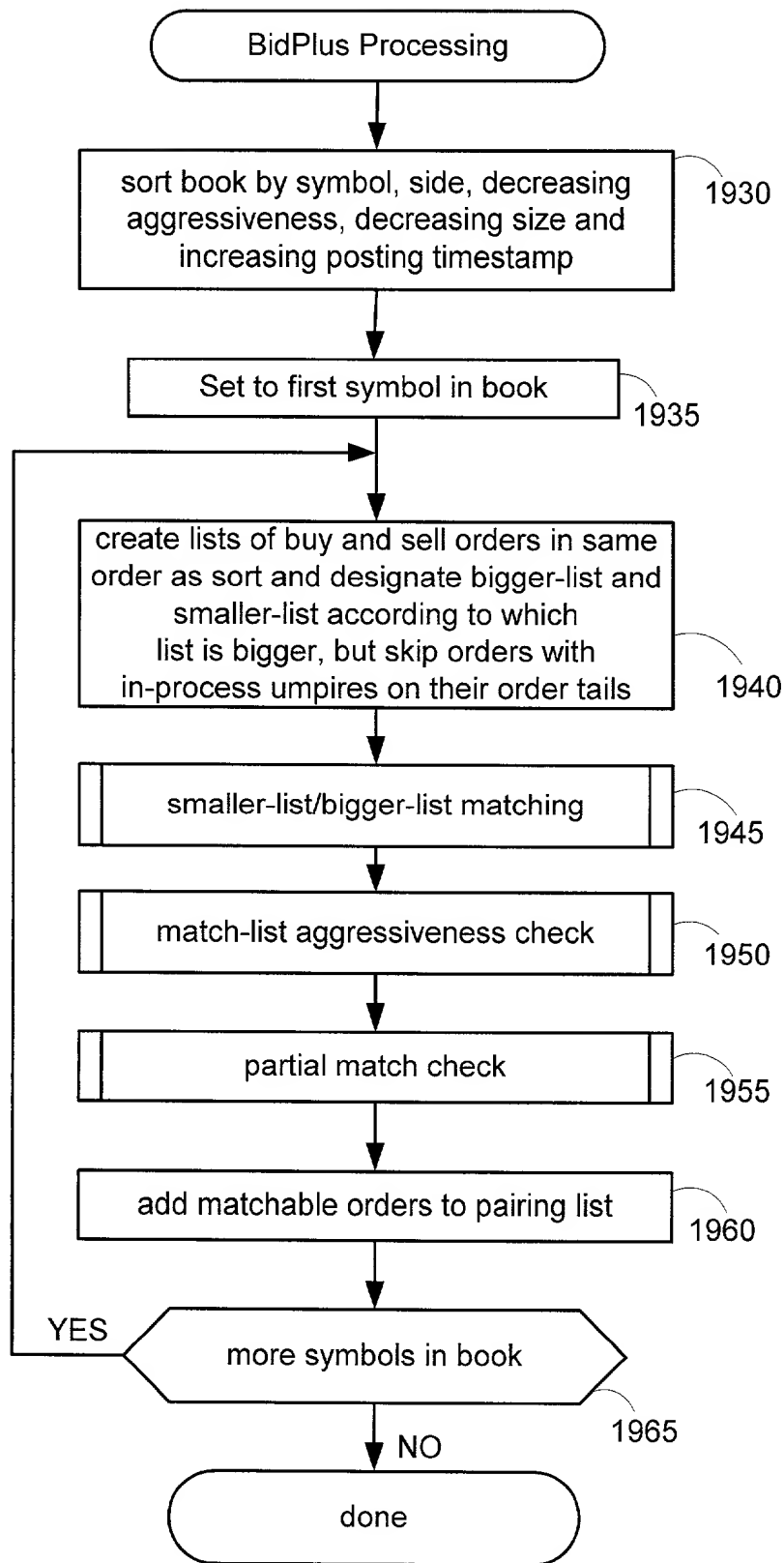


FIG. 88

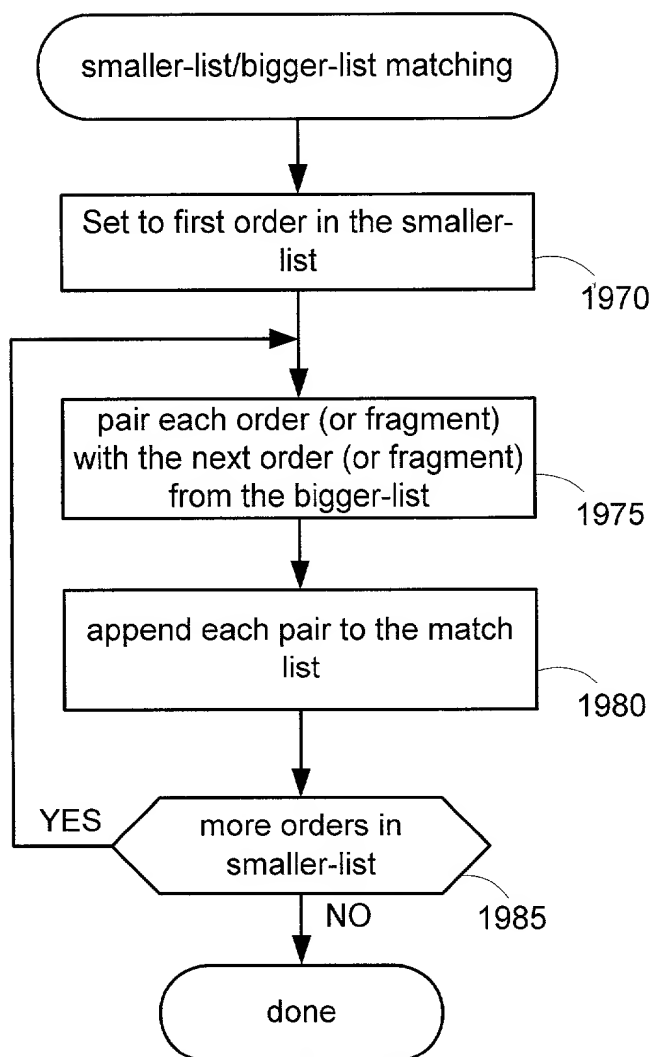


FIG. 89

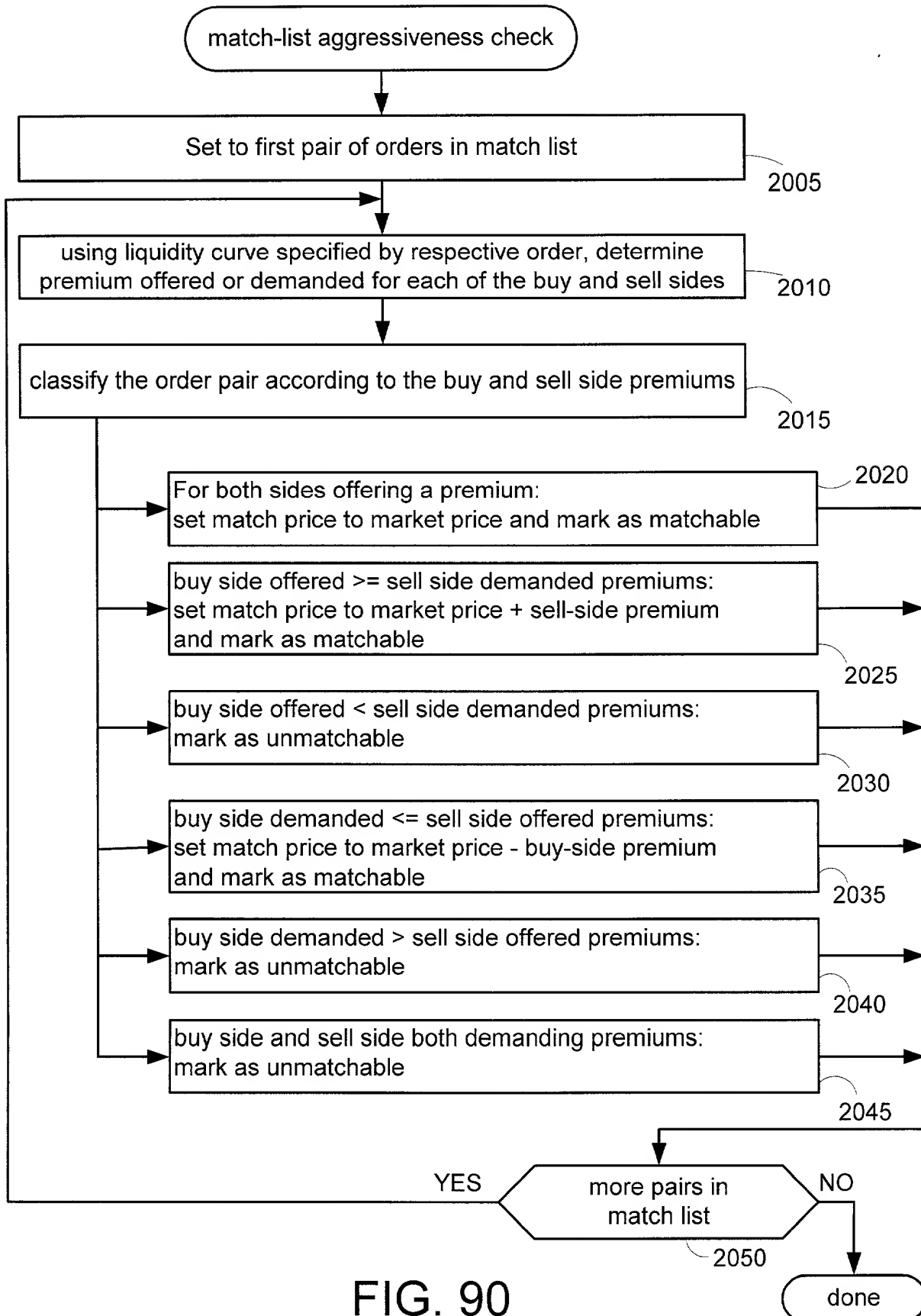


FIG. 90

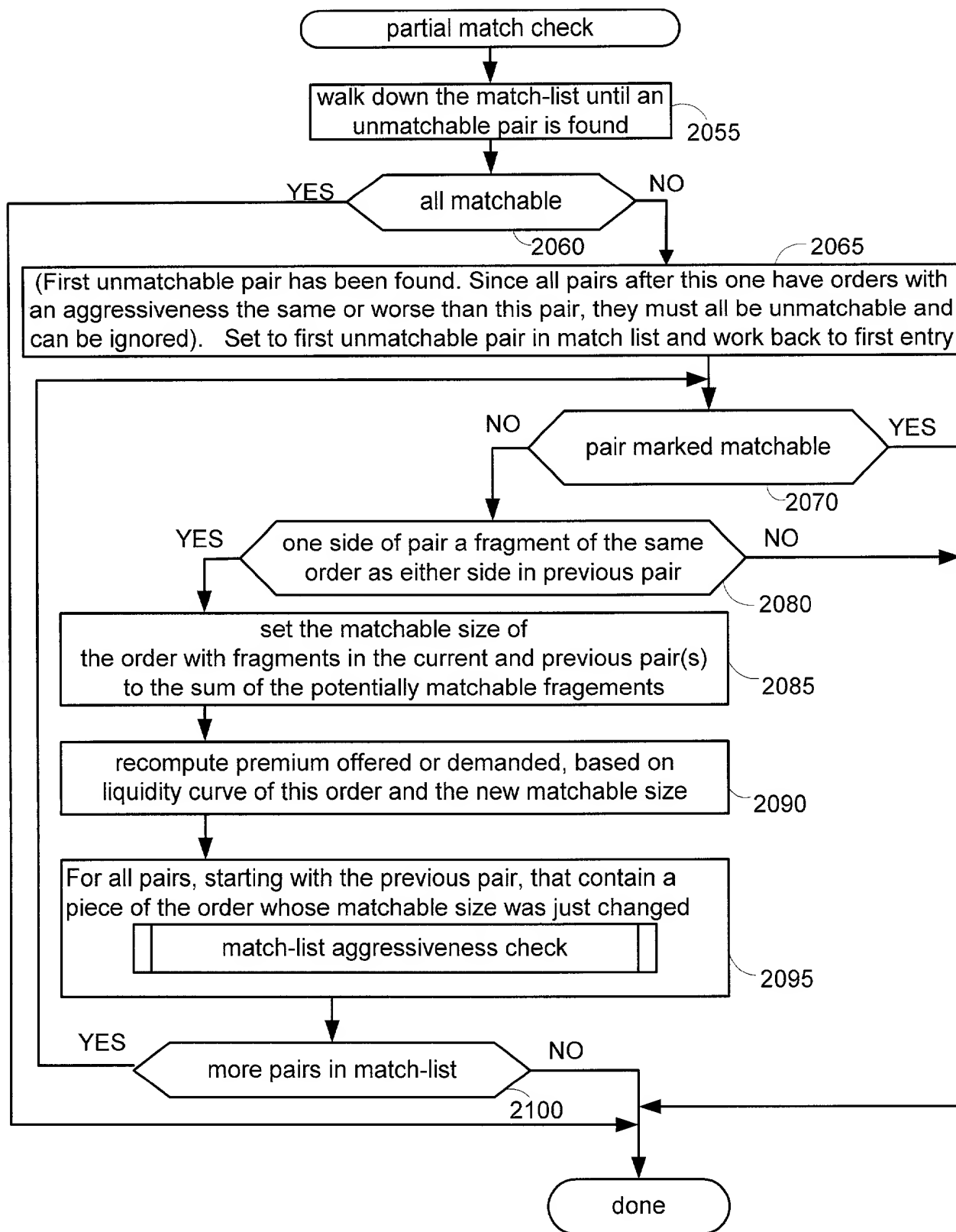


FIG. 91

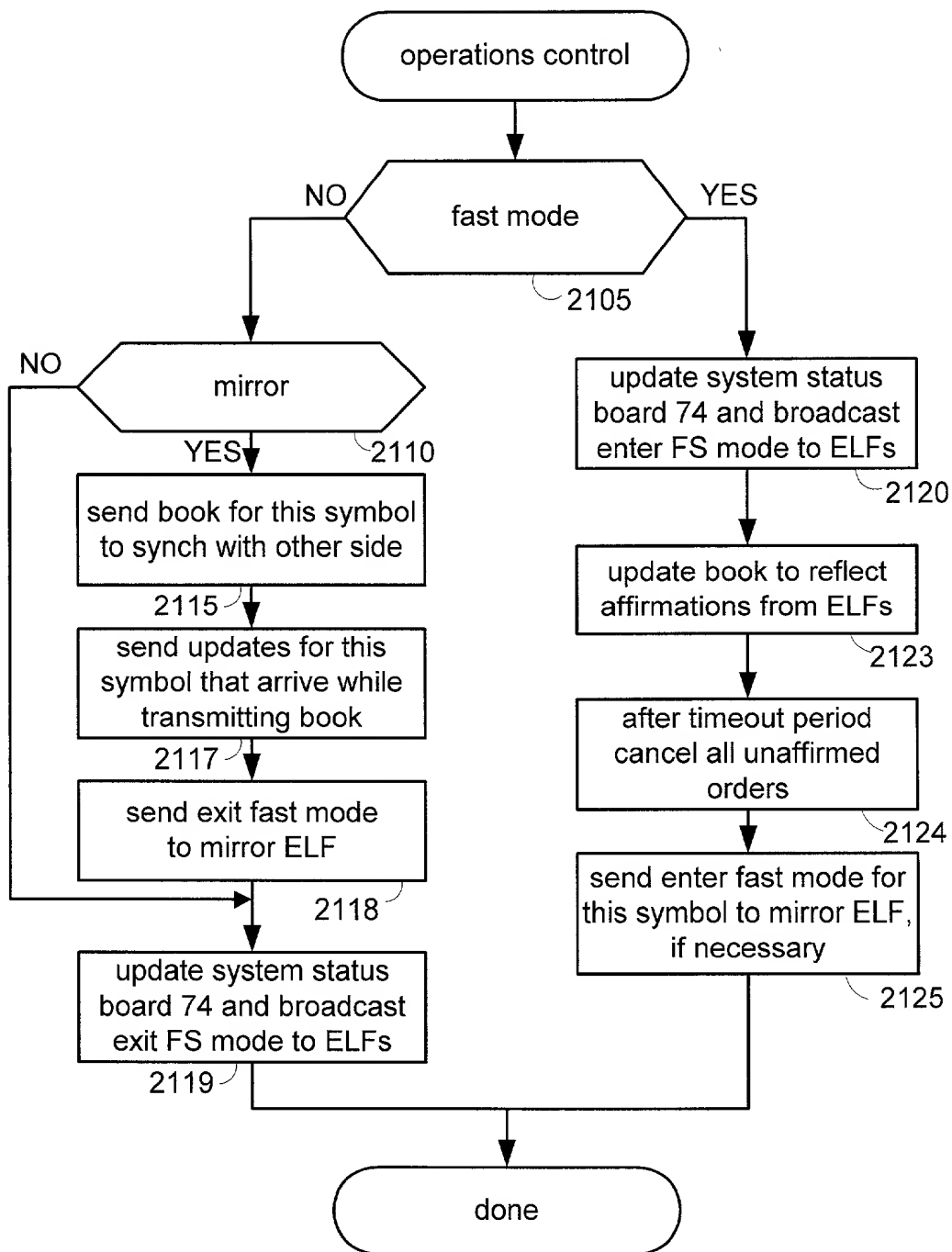
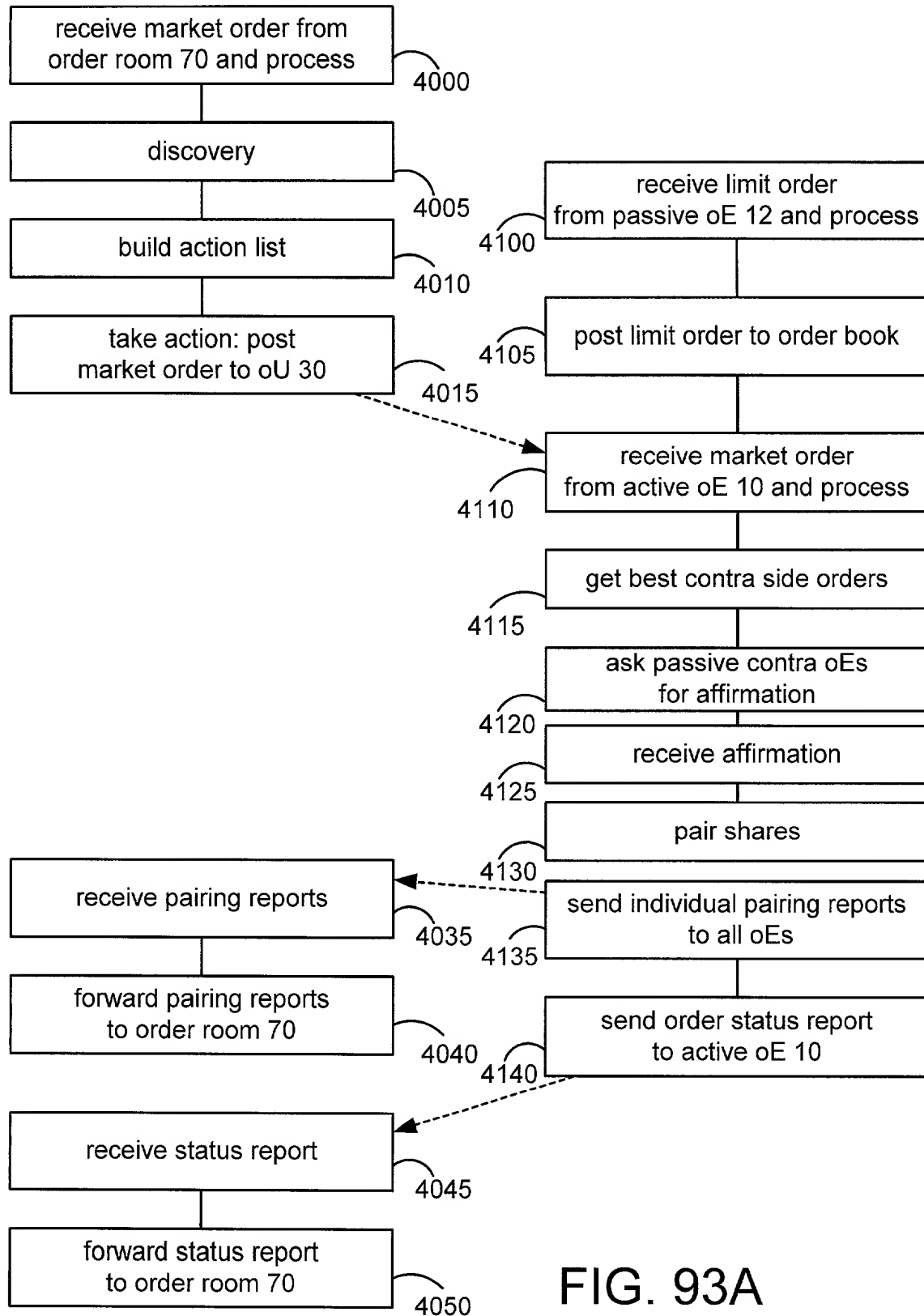
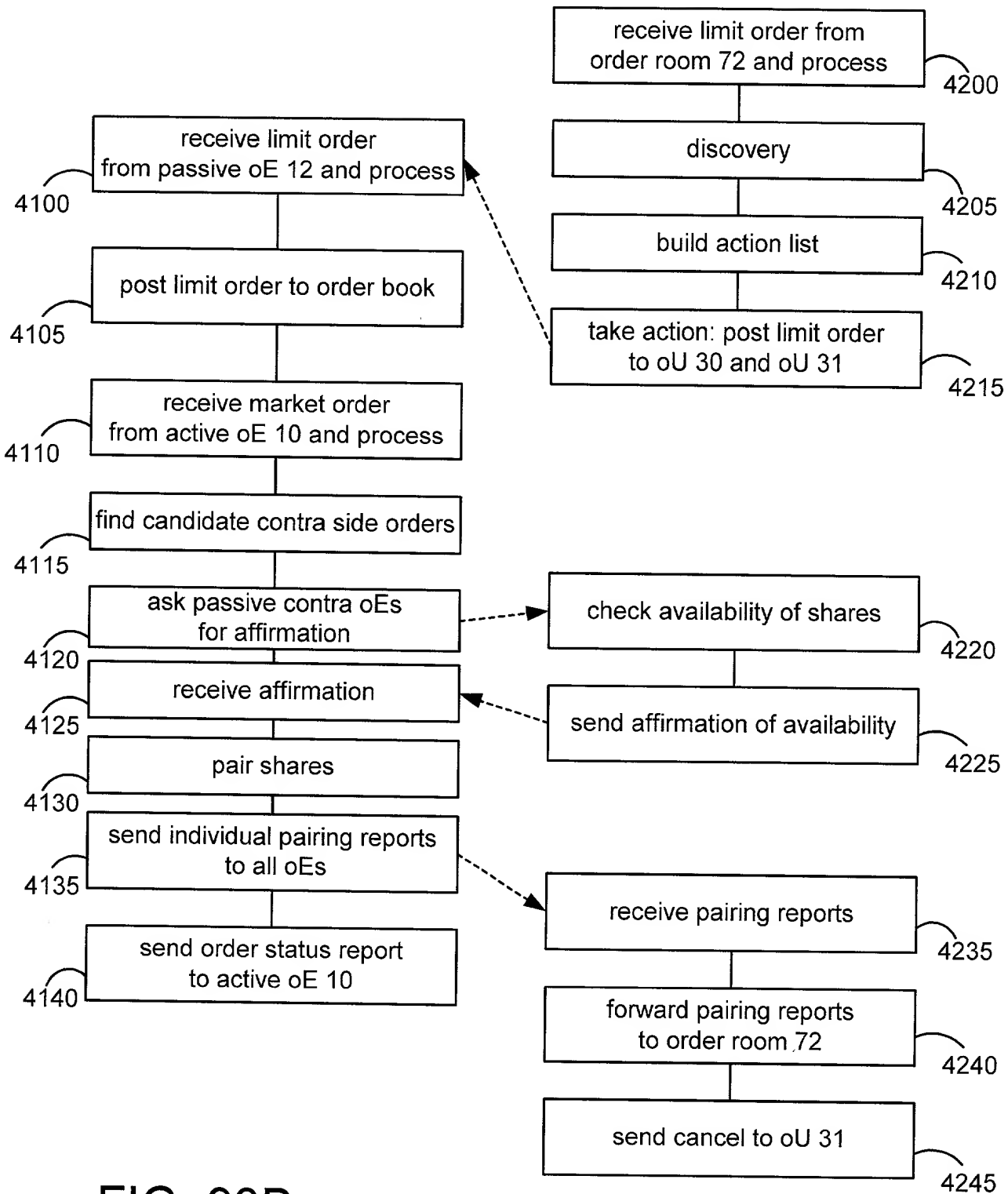
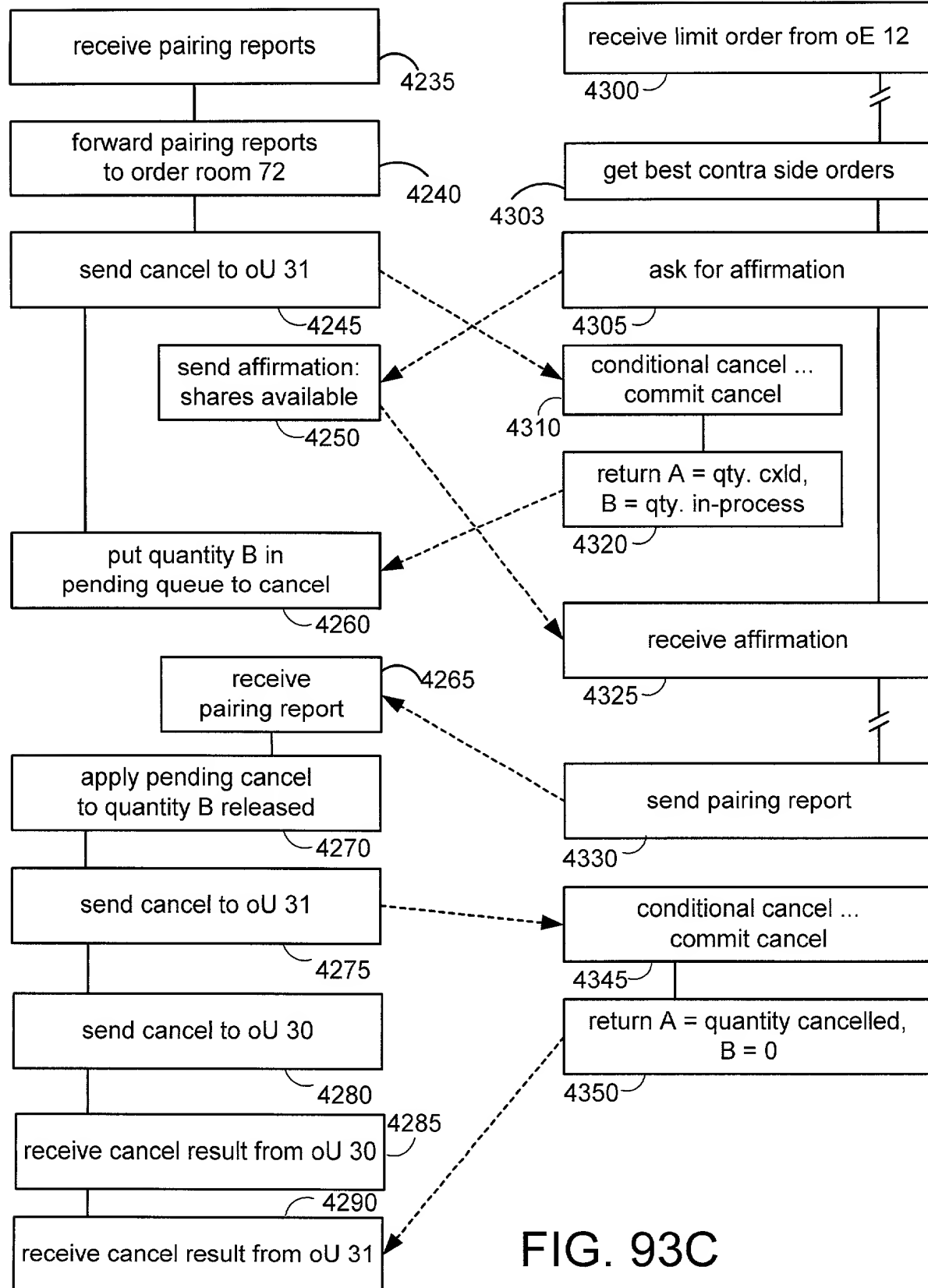


FIG. 92

**order ELF 10****order umpire 30**

**order umpire 30****order ELF 12****FIG. 93B**



**order ELF 12****order umpire 31****FIG. 93C**

oU 31

mE 51

oU 32

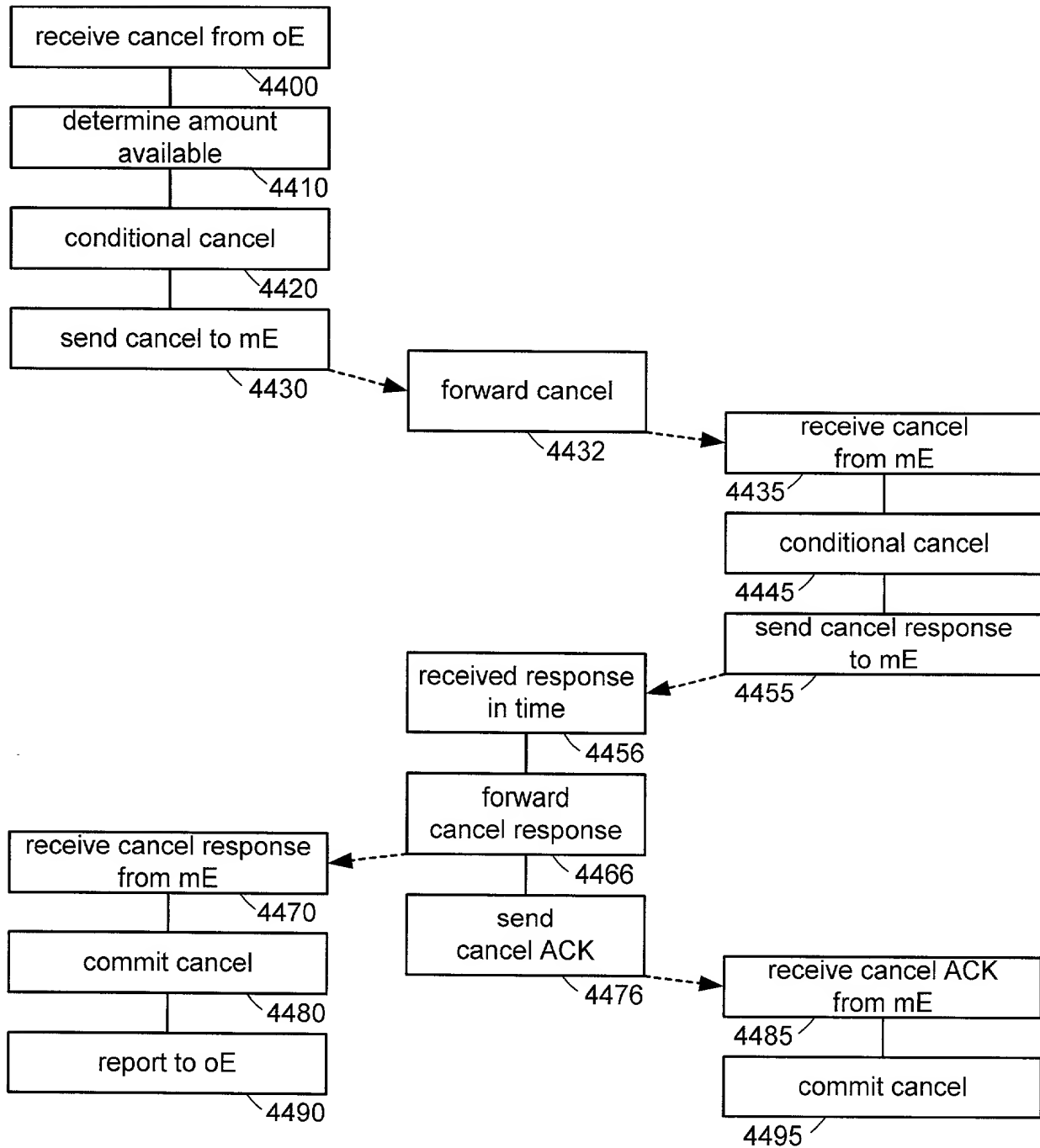


FIG. 94

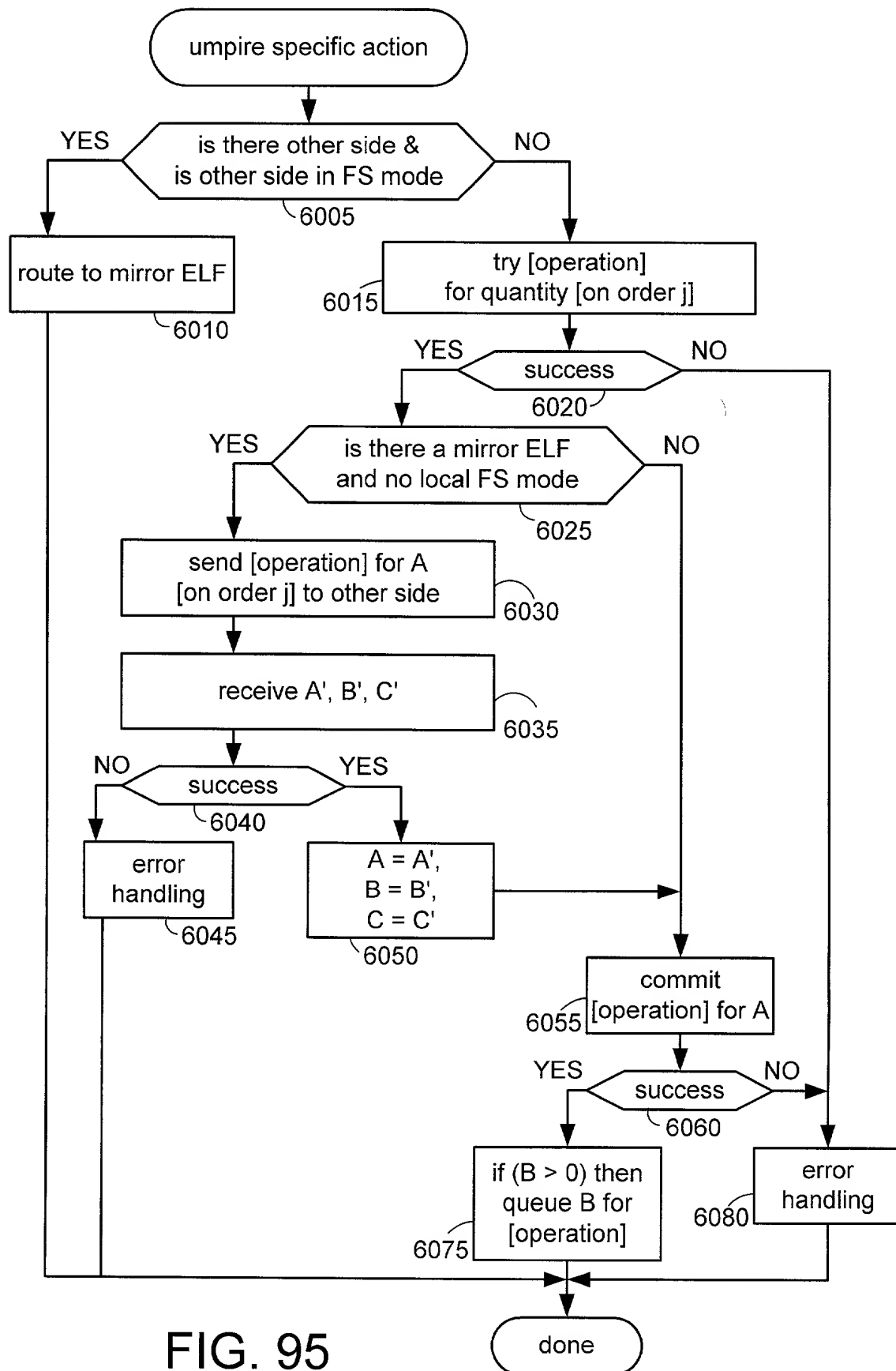
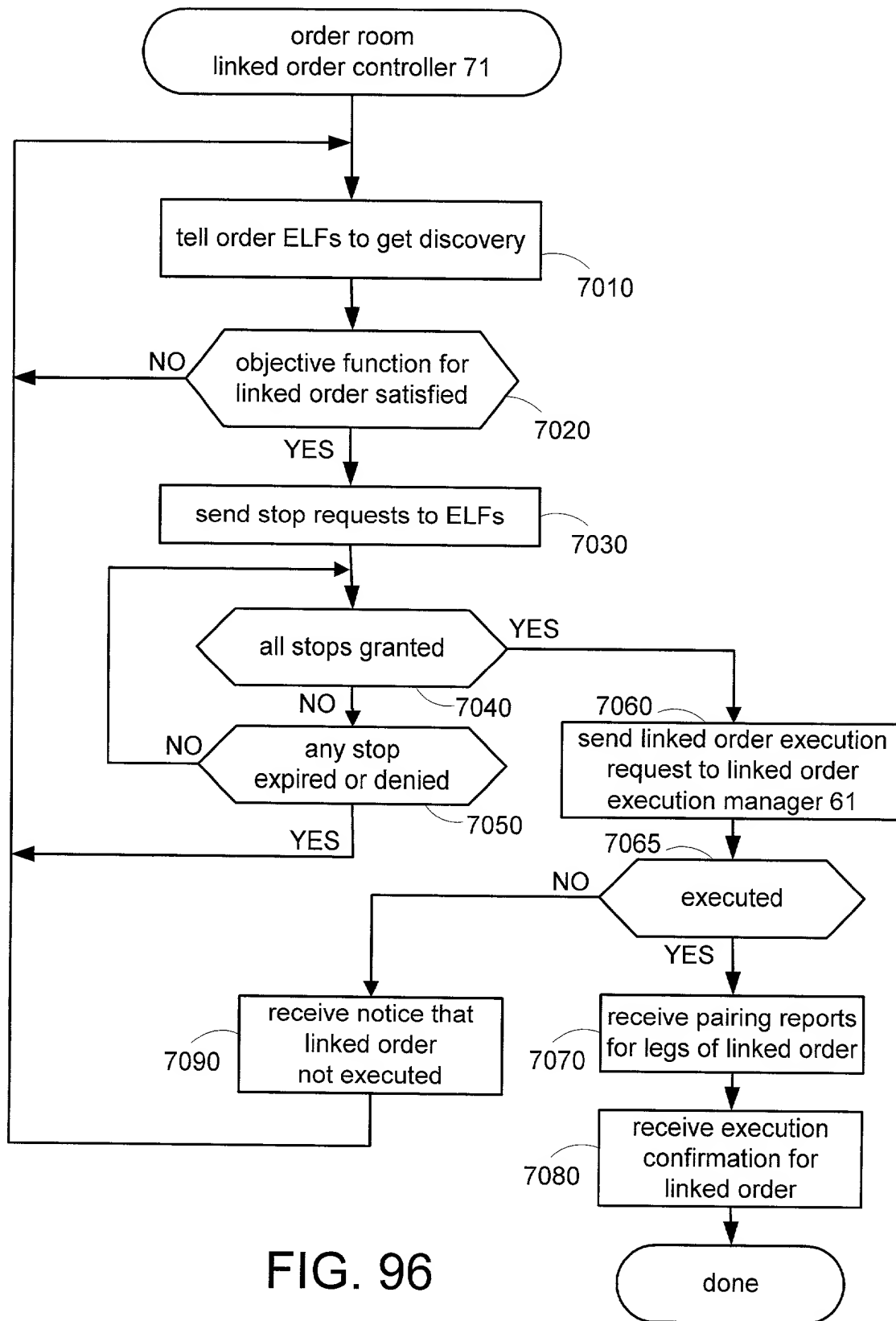


FIG. 95



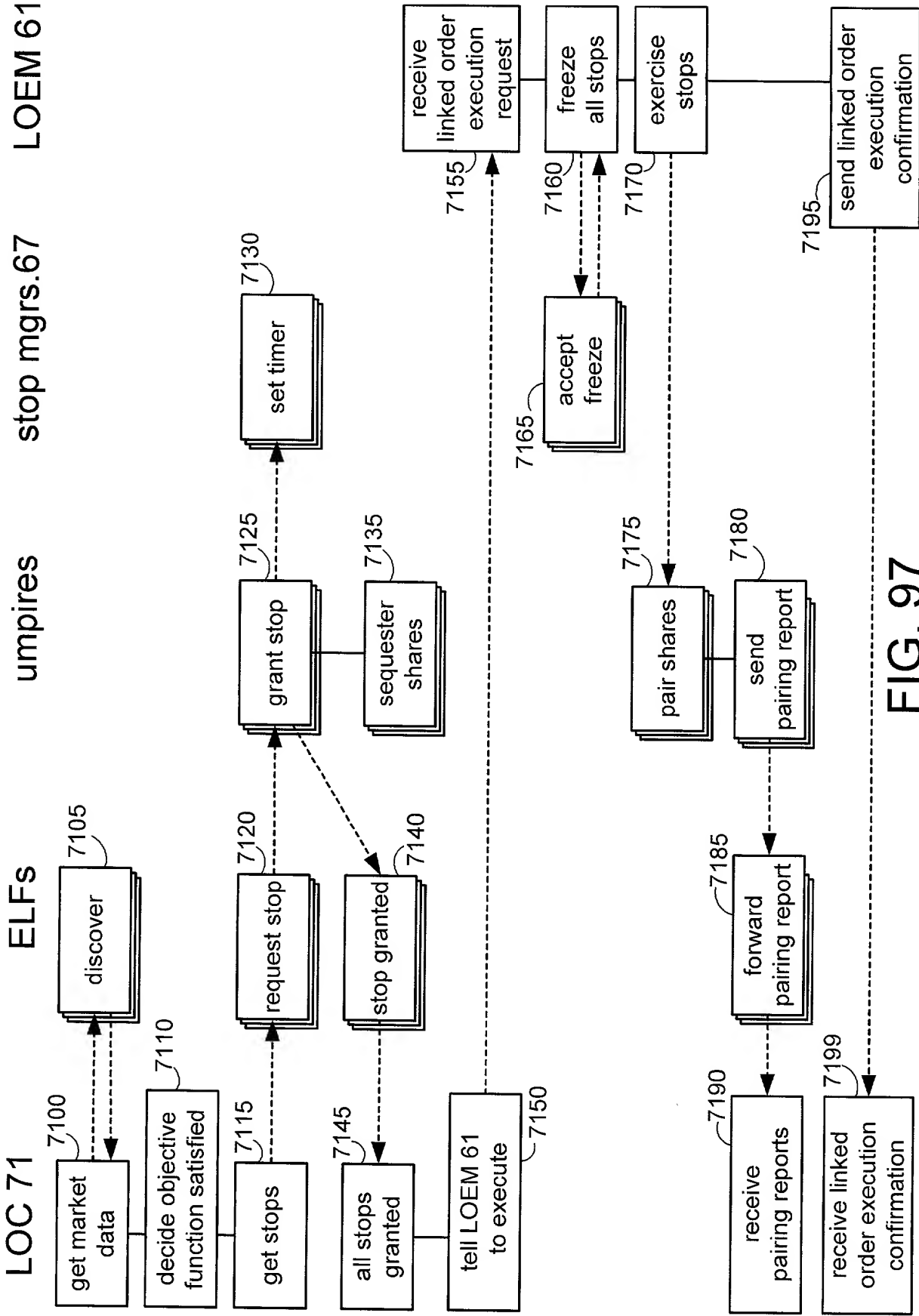


FIG. 97

## order umpire 30

## order ELF 12

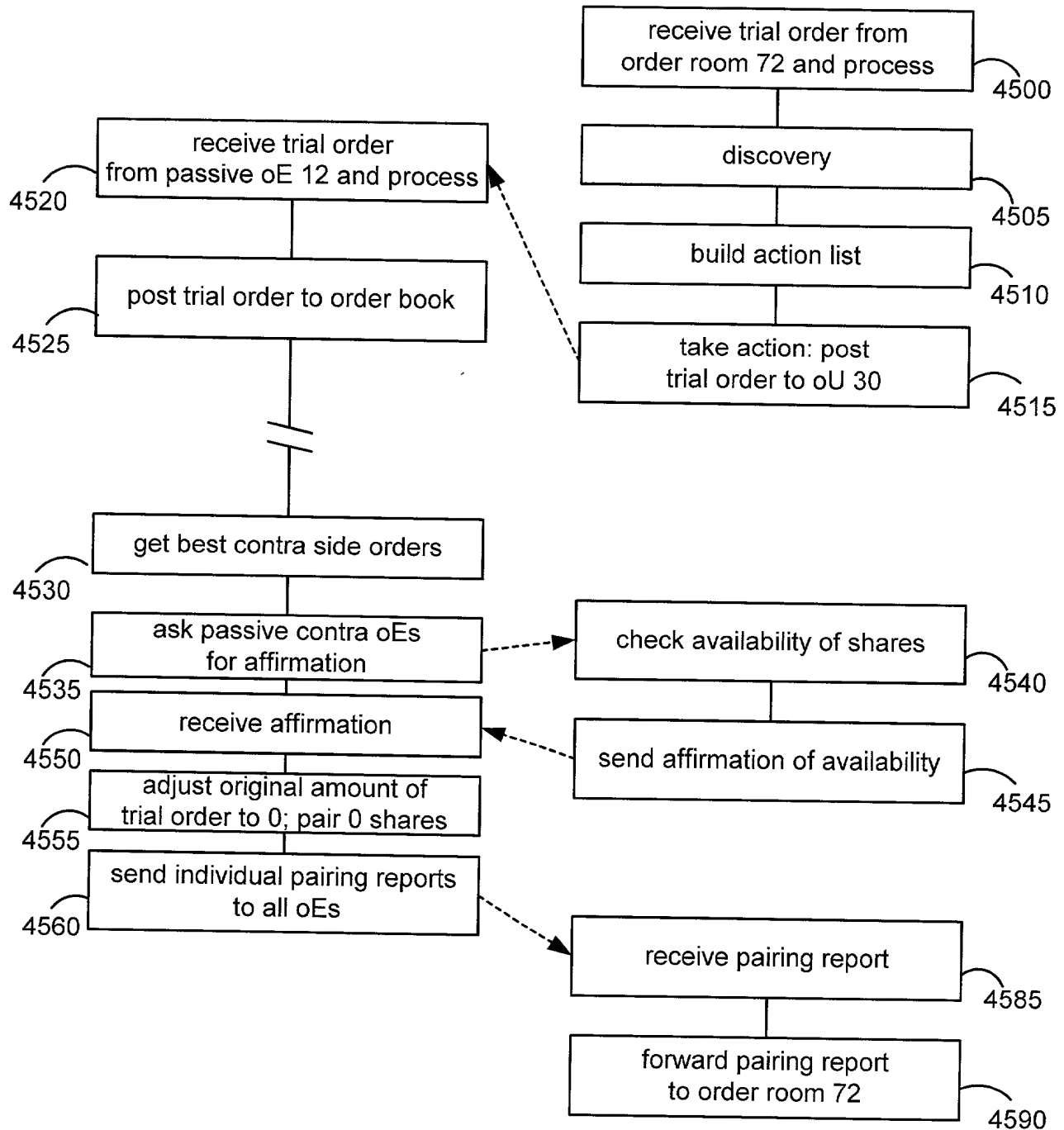


FIG. 98

oE 10

oU 30

oE 12

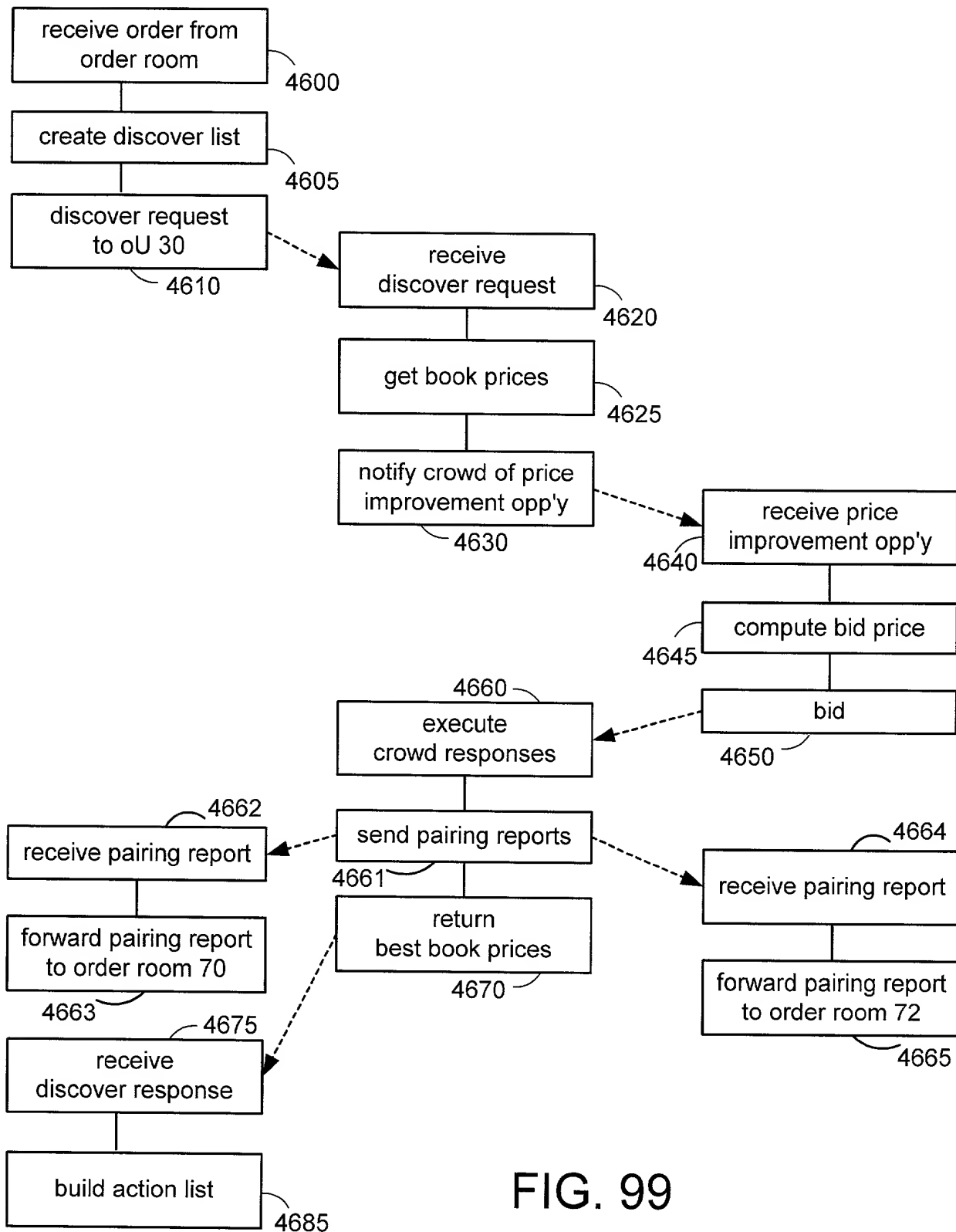
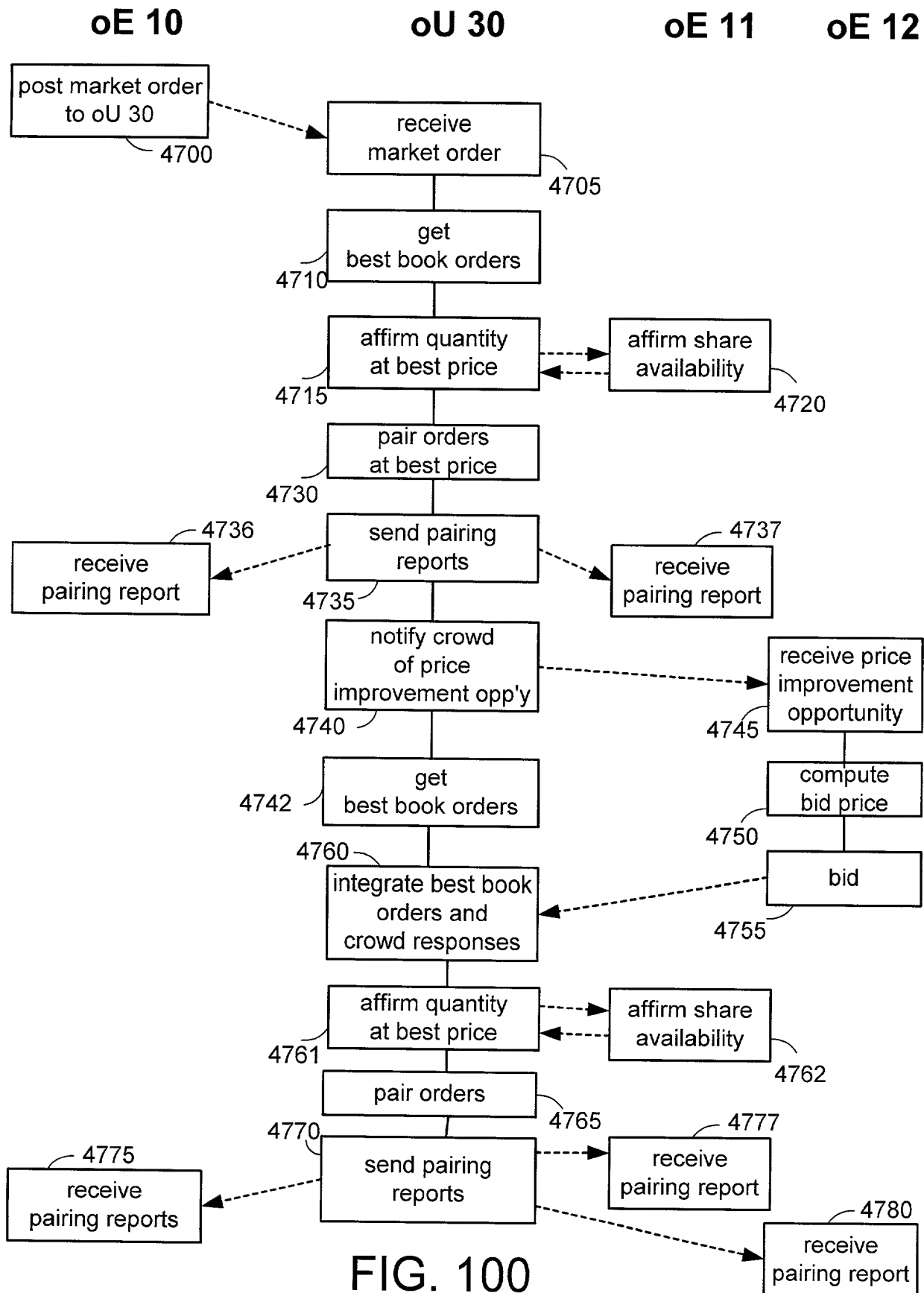


FIG. 99





oE 10

oU 30

oE 12

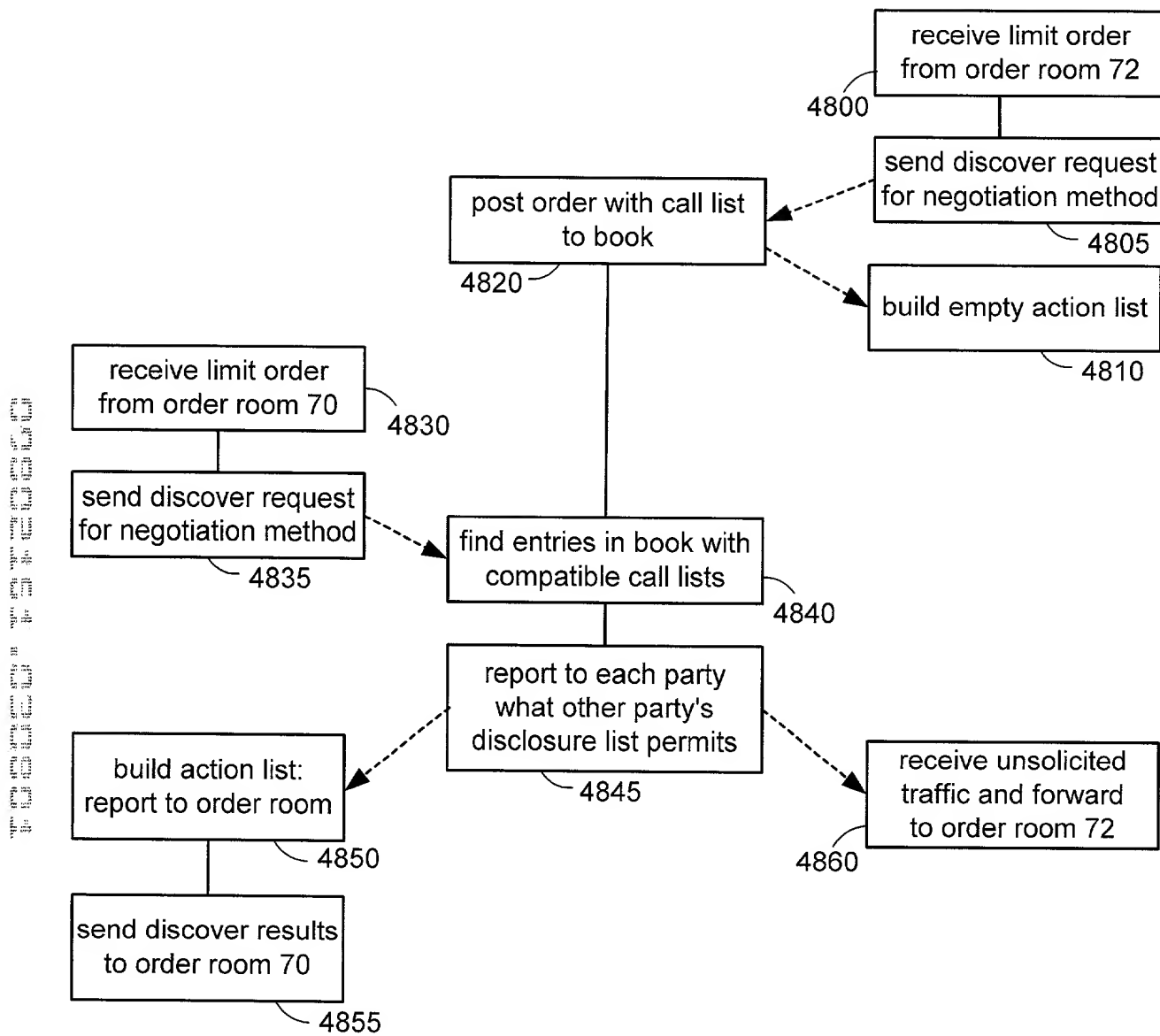


FIG. 101

oE 10

oU 30

oE 12

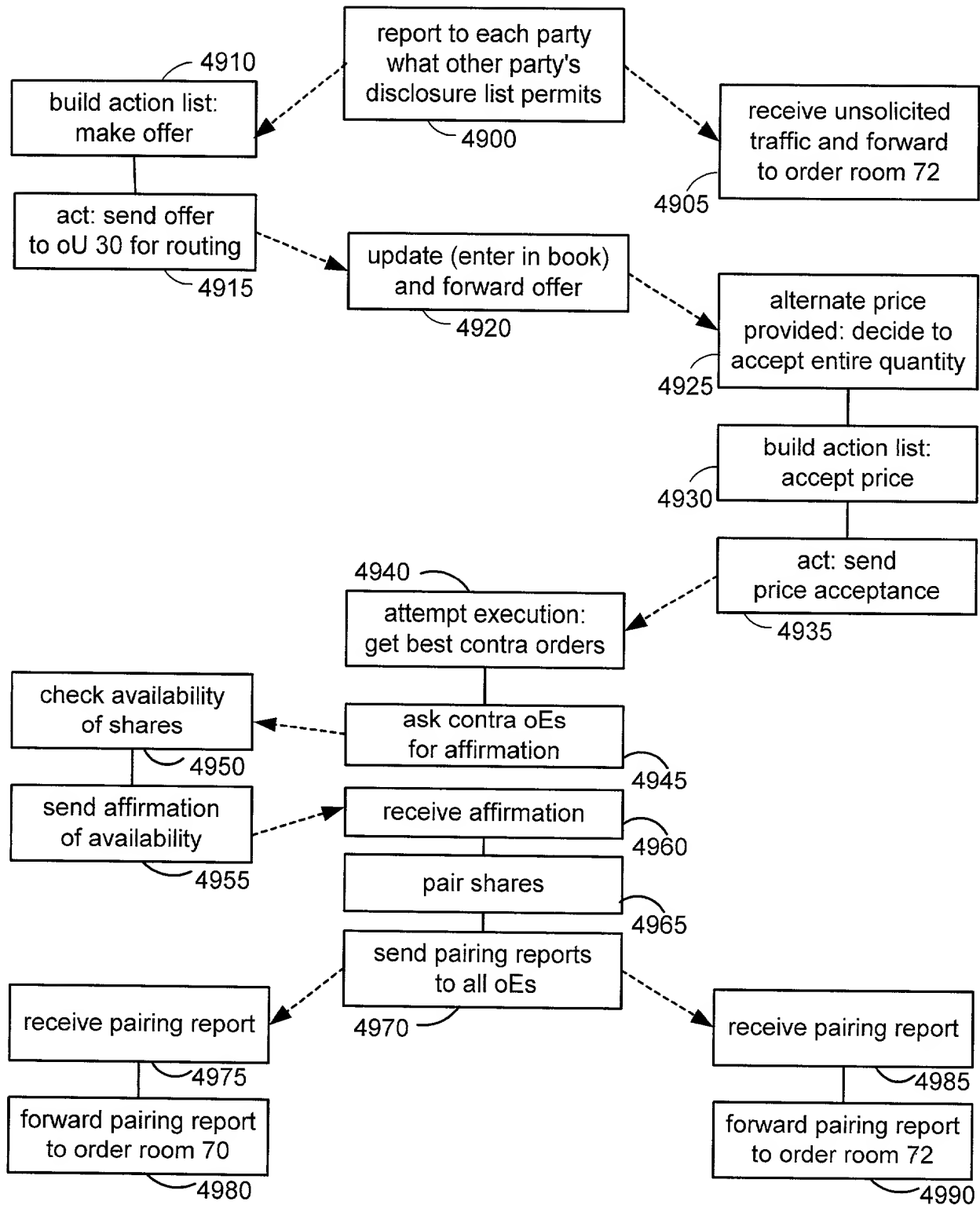


FIG. 102

oE 10

oU 30

stop order mgr 67

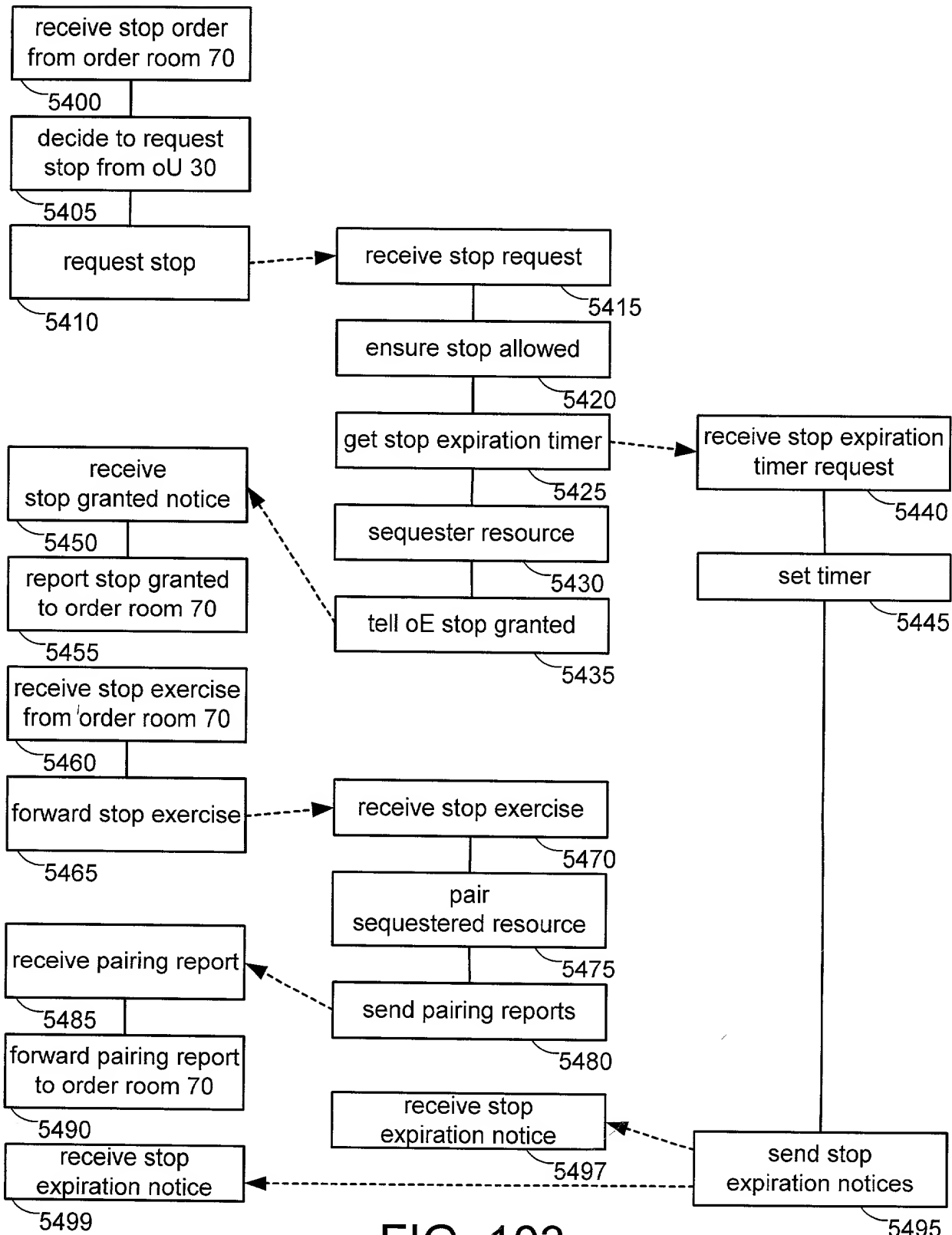


FIG. 103